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Lecture.

GONORRHŒA IN THE MALE; ITS NATURE, CAUSES, AND TREATMENT.

Delivered in the Medico-Chirurgical College of Philadelphia,

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(*Concluded from page* 172.)

We now come to the treatment of gonorrhœa. This is accomplished by two methods, the local, or external, and the internal. The former consisting of the use of injections, insufflated powders and medicated suppositories; the latter, the internal administration of certain remedies, generally balsamics. I am not an advocate of the latter method, for while in certain cases the remedies act advantageously, it is a slow, cumbrous, disagreeable style of treatment, often doing more harm to the system than good, by the disturbances in digestion it occasions. I rely much more upon injections and other local remedies. It will be well to discuss for a few minutes the urethral syringe, and its proper use. I first show you the ordinary glass penis syringe. It is the most extensively used of all the syringes, but is generally faulty in construction, the tip being too sharp, and apt to irritate the mucous membrane of the urethra. The packing of the piston is made of soft cotton twine, and is generally loose, causing the injection to spirt from the back part of the syringe. Should the packing be well done the instrument then works stiffly. Here are a number of other styles, some good, some bad, and some indifferent. The most of them have too sharp a tip. The best form of glass syringe is the P. P. bulb syringe. It consists of a hollow rubber ball holding about half a fluidounce, in which is fixed a glass tube about three inches long, terminating in an appropriate tip. By compressing the ball so as to force out the air, and then placing the end of the tube in the injection, a quantity of the latter will be drawn up, and can then be ejected by gently pressing the bulb. It is much more easily worked than the piston syringe, as the stiff movement of the latter will cause a nervous patient much trouble. As ordinarily found in the stores, the tip is also too sharp; but I here show you one which has been made to order, having the proper shaped end. This should be a cone, at the apex being the size of a bougie No. 13 French scale, at the base No. 30 French scale. When made of this shape it will fill up the meatus, without projecting far enough in to irritate the urethra. The hard rubber piston syringes are of much better workmanship than the glass, and consequently to be preferred. They are expensive however.

Another great trouble in syringes is that they are generally too small. A good penis syringe should have a capacity of from f℥ij to f℥ss, preferably the latter, as a smaller amount of fluid will fail to thoroughly distend the urethra and allow the injection to penetrate into every fold. You should direct the patient to first pass his urine, so as to thoroughly wash out the urethra and prevent any of the discharge from being carried back by the injection to a healthy surface, where it may cause an extension of the disease. Then direct him to assume the recumbent position, if possible, take the glans penis between the thumb and forefinger of the left hand, and separate the lips of the meatus, and

introduce the tip of the syringe, pressing it gently inward until it entirely fills the meatus. Hold it in position by gentle pressure of the lips of the meatus against the tip of the syringe, and then slowly force in the injection from the syringe, until the urethra is fully distended. Then remove the syringe, quickly slipping over the meatus the end of the forefinger, so as to keep the injection from escaping. The liquid should remain *in situ* for full five minutes, at the same time frequently stroking the under side of the penis, so as to thoroughly distribute the injection. At the end of that time let that injection escape.

The medicinal treatment of gonorrhœa may be divided into that of three stages: 1st. The incipient. 2d. The acute. 3d. The subacute or stage of decline. If you can see your patient when the attack is just beginning, you may, in some cases, succeed in aborting it entirely. This is done by injecting a solution of nitrate of silver into the urethra, of such strength as to induce an active inflammation, lasting for four or five days, and thus supplant the morbid action, which may last for a much longer time. This mode of procedure has been very justly condemned. In some few cases it may abort the disease; but in the greater majority it aggravates the inflammation and increases the suffering of the patient. The trouble is that a patient is seldom seen in the incipient stage, as the symptoms are then so slight as to be often overlooked. When he does come for relief it is from the suffering of the acute stage, and then this treatment will only heighten his torment. I believe, however, with a careful selection of cases you may sometimes succeed, provided the injection be not too strong. The strength formerly used was from 20 to 30 grains of nitrate silver to f℥j of water (used once as an injection), this is entirely too strong, and I must unhesitatingly condemn it, as it will nearly invariably produce stricture. I have operated on several cases of stricture produced in this manner. The formula recommended by Bumstead (argenti nitratis, grs. ss–iss. aquæ, f℥vj) is much more safe; it is to be used at intervals of three or four hours. In the course of twenty-four hours the discharge decreases, grows thin and watery, and tinged with blood. Now is the time to stop injection, and omit all medication for a few days, until we see how much good has been accomplished. If the treatment is successful, the discharge will totally disappear in four or five days.

In the acute stage of gonorrhœa the proper regulation of the diet and habits of the patient is a matter of great importance. If you can keep him in bed for a few days you will accomplish a great deal. If the testicles are at all tender they should be placed in a suspensory bandage. The diet during the active stage should be non-stimulating but nourishing, and all indulgence in liquors, particularly beer, ale, etc., should be strictly forbidden. The bowels must be kept open.

The first point in the medicinal treatment should be relief of the painful micturition, and the swelling and congestion of the penis. As the urine in this affection is apt to be acid and irritating, we should endeavor to render it bland and alkaline in character, and we therefore administer such salts as are decomposed in the blood with the liberation of an alkali. These are the alkaline citrates, carbonates and bicarbonates, acetates, tartrates, etc. They should be administered in their appropriate doses, largely diluted with water. As regards the use of flaxseed tea, and all other demulcent diluents, they are old women's remedies, and simply useless. The best time to administer the alkalies is *two hours after meals.* The officinal liquor potassæ, in doses of from 10 to 20 drops, is also a very good remedy, administered in the same manner. A prescription which I often use, especially when there is increased frequency of micturition and chordee, is the following:—

℞. Potassii nitratis, ℥ij
Potassii bromidi, ℥ss
Morphiæ sulphatis, grs. ij
Ext. gelsemii, fld., f℥j
Syrupi, f℥j
Aquæ camphoræ, ad f℥vj. M.

Sig.—A tablespoonful in half a tumbler of water, two hours after meals.

The urine should be repeatedly tested with litmus paper, and the quantity of alkali so regulated as to give it a neutral or slightly alkaline reaction. The penis should be kept lightly wrapped in a cloth constantly saturated with the following mixture:—

℞. Liq. plumbi s'ac, f℥iij
Tinct. opii, f℥j.
Ft. misturæ.

In addition, the patient should be directed every morning and evening to immerse his penis for about fifteen minutes in hot water. This should be so hot as to be on the verge of scalding; thus applied the pain is greatly relieved and the swelling of the glans and prepuce soon disappears. Should the prepuce be greatly swollen and infiltrated, it may be necessary to slightly scarify or puncture it with a sharp-pointed bistoury, so as to deplete the part. Should the urethra be very

sensitive, the inflammation high, and the meatus much contracted, the above should constitute the entire treatment, and no local measures be instituted until the more active symptoms have subsided. In the majority of cases, however, the channel is not so sensitive as to prevent the use of a syringe, and an opiate injection can be administered in addition to the previous treatment. This should consist of the following:—

℞. Ext. opii aquosæ, ℈j
or
Morphiæ sulphatis, grs. iv
Ext. belladonna alc., grs. v
Mucilaginis cydonii,
Aquæ, āā. f℥j. M.

Sig.—Add a teaspoonful to a tablespoonful of hot water, and use as an injection, every four hours.

As soon as the acute stage begins to subside, the local use of an astringent must be commenced. With this should be mixed an opiate, until all painful symptoms have disappeared. Probably the best and most commonly used astringent is the sulphate of zinc; following it are the subacetate of lead and the acetate of zinc, while the astringent salts of copper, iron and cadmium, and the vegetable astringents, tannic acid, kino, catechu, krameria, etc., etc., prolong the list. I rather prefer the sulpho-carbolate or salicylate of zinc. In commencing with an astringent injection, it should not be too strong, and should not contain more than ¼ gr. or ½ gr. of the weaker mineral astringents to the fluid-ounce; of the vegetable astringents more can be used, but the stronger mineral astringents, such as the chloride of zinc and sulphate of copper, must be given in very small doses, and had best be left for more chronic cases. A very soothing remedy in the subacute stage is the liq. plumbi s'ac:—

℞. Liq. plumbi s'ac, ℥ss–℥j
Morphiæ sulphatis, grs. iv
Glycerinæ, f℥ss
Aquæ, ad f℥iv. M.

Sig.—Use as an injection, four times daily.

The subacute stage is the only one in which the balsamics, such as copaiba and cubebs, etc., should be used. I do not depend much upon them. They are most useful in bladder complications, where they are extremely valuable. They should be given in small doses, in either the form of an emulsion, or in a soluble gelatin capsule; of these the soft capsules are much the best, as they are more easily swallowed and have no taste. The essential oil of sandal has been highly recommended, but I have no faith in it, as I have found it to have very little value, and to so saturate the patient with its peculiar odor as to make him an object of attention and remark.

In the latter stages of gonorrhœa, where the discharge is profuse and watery, and where there appears to be a loss of tone and a relaxed condition of the mucous membrane, you will find the oxide of zinc to be a valuable agent, either alone or combined with a small quantity of hydrastis canadensis.

℞. Pulv. zinci oxidi, ℥ij
Mucilaginis cydonii, f℥iij
Aquæ, ad f℥iv.
or
℞. Pulv. zinci oxidi, ℥ij
Ext. hydrastis, fld., f℥ij
Mucilaginis cydonii, f℥iij
Aquæ, ad f℥iv. M.

Sig.—Use as an injection, three times a day.

You will notice in a number of these formulæ I have used the "mucilago cydonii," or quince mucilage. This is a bland, cooling vehicle, which is very grateful as an injection.

Another method of treating gonorrhœa locally is by means of "insufflation," or blowing powdered medicaments into the urethra. It is a poor plan. Another and much better method, is by the use of urethral suppositories. They are made of different lengths, of cacao butter or gelatin, the latter being preferred, on account of its flexibility, and act even better than injections. They must not be used in the acute stages, as a general rule, but act very well in subacute and chronic conditions.

By the use of the different methods which I have at length detailed to you, with such modifications as your judgment will suggest, I think you will have very little trouble in curing the great majority of your cases of gonorrhœa. It is still remains for me to speak briefly of the treatment of the two complications of chordee and hemorrhage. Chordee is best treated by immersing the penis in hot water, and by the internal use of the bromides, opium, hops and lupuline, etc. If the case is at all severe, you will find the above remedies to be inadequate, and then you must rely upon opiate rectal suppositories. These should be of morphia, ext. opium, ext. belladonna, or some other anodyne, given in full doses until relief is obtained. A very good formula is the following:—

℞. Chloralis hydrat., ℥ss
Camphoræ, grs. xij
Morphiæ acetatis, grs. ij
Ol. theobromæ, q. s. M.
Ft. suppos. no vj. (15 grs. each).

Sig.—One every hour, until relieved

Hemorrhage should be treated by the applica-

tion of cold to the penis. In severe cases a styptic injection, such as a weak solution of the subsulphate of iron, can be used, and in some cases a full-sized sound must be passed into the urethra, and a compress applied around the penis. A moderate amount of hemorrhage should not be restrained as it is more beneficial than otherwise.

And now, in conclusion, let me advise you to put your patients on good, rich, generous diet, as soon as the acute stage has passed, and if they are at all debilitated, give them tonics, such as the preparations of iron, quinine and strychnia. Also remember that your astringent injections must never be too strong, and that if the little stinging pain they occasion lasts over five minutes, the injection must be diluted, to act well.

COMMUNICATIONS.

A SIMPLE GALVANIC ELEMENT FOR THE TREATMENT OF CONSTIPATION.

BY WM. R. D. BLACKWOOD, M.D.,
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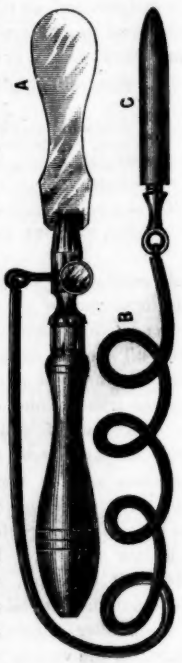
Every physician is fully aware of the absolute necessity of a full and free alvine evacuation at least once daily, and he also knows that with very few exceptions a soluble condition of the bowels is of major importance in the conduct toward recovery of his patient, when suffering from disease. It is beginning to be understood that even in those maladies and operations in which the former practice was to lock up the bowel, it is now preferable to maintain a normal state, and simply prevent the diarrhœal effect which may be anticipated. It is most important, in the young, that the habit should be cultivated of attention to regularity in stool, and much of the prevalent dyspeptic tendency is undoubtedly due to neglect of this point. The indiscriminate use of aloetic and mercurial cathartics by the public, in the shape of patent medicines, against constipation, either with or without the sanction of their family attendant, is a growing evil, and should be checked, for much more harm is done in this way than is popularly understood. The canonical method of dealing with constipation presents little breadth in the materia medica employed, and treatment by drugs alone does not often radically *cure*, but merely *alleviates*. In my own practice the best results have been obtained in permanently securing a regular habit through attention to a regular time for defecation—say just after breakfast—combined with faradization and massage of the abdomen. The necessary mechanical or manual part of this process can be taught to the patient, or to the attendant; but the electrical treatment should, except in the case of unusually intelligent patients, be kept in the hands of the physician, for obvious reasons. Those of our readers who are fathers, can doubtless appreciate the trouble caused night after night by the infant, when dirty diapers had been scarce during the day, and how much relief baby had from the use of the old fashioned soap suppository. A recent improvement upon this time-honored instrument is presented in the galvanic suppository, illustrated; and, simple as it is, a somewhat extended experimentation has proved its value beyond a doubt. Although the whole arrangement can be placed in a moderate sized pocket-book, the current developed during its use is equal nearly to that from a small cell 1½ x 1 x 5 inches as determined by a sensitive galvanometer; the current strength being 2 millivebers when in actual use, and nearly 5 millivebers when the elements were placed in a moderately strong saline solution, as, for instance, sodium or ammonium chloride, and the conducting cord replaced by a wire six inches in length. The resistance interposed by the longer cord when in actual use, is so slight as to be disregarded. A simple method of testing the intensity of this little couple is, to insert the zinc negative, or cathode (*C*) into the anterior nares, pushing it up as far toward the frontal sinus as possible without eliciting discomfort, and placing the silver anode (*A*) or positive electrode, upon the tongue, keeping the conducting cord disconnected. Now make and break the circuit, by touching the separated pole with the pin at the free end of the cord, and the flash of light produced by all galvanic applications in this locality, through reflex on the optic nerve, will at once be developed. The current is sufficiently powerful to stimulate intestinal muscular contraction throughout its whole length, and its therapeutic effect is obtained by simply placing the anode upon the tongue and clo-



sing the mouth upon it, the cathode being passed nearly its whole length into the anus, the necessary acidity being supplied by the fluid in the mouth and rectum. In some patients a single application before going to, or while in the closet, for five to fifteen minutes, suffices; in others it should be used at bedtime and in the morning. In very obstinate cases the injection of an ounce or two of salt water into the rectum renders the action more intense, the fluid being retained until the stool is had. Its employment should be maintained for ten days or two weeks, and then gradually discontinued, the strictest attention being, of course, paid to regularity as to visiting the water-closet. That the effect is due to the galvanic current is proved by purposely interposing a non-conducting cord while experimenting, and by substituting plates which do not produce a current. The patients, of course, under these circumstances, were not aware of the defect, and, therefore, the imagination had full play, and the mechanical irritation induced by distention of the sphincters, was also active; yet the result was, in such experiments, uniformly negative. The current may be used in aural practice, by dropping a little salt water into the meatus, and entering the negative rod a short distance therein, the positive being placed upon the tongue. In the earache of childhood this manœuvre has been followed by good results, in a few cases in which it was tried, but the main object is to overcome constipation, and this the miniature battery will assuredly do, with but little perseverance, small expense, and neither trouble nor medicine.

The instrument is neatly made by one of the electrical instrument manufacturers of this city, and the cost is, I am told, quite moderate.

246 *North Twentieth street.*

LARGE UTERINE FIBROIDS—HOW TO DEAL WITH THEM.

BY WILLIAM VARIAN, M.D.,
Of Titusville, Pa.

About twelve years ago I developed to my preceptor, the late Washington L. Atlee, the following plan for an operation which I had devised for the destruction of large sub-peritoneal uterine fibromata, which seemed to me to combine efficiency with comparative safety to the patients. The methods hitherto attempted for the extirpation of these adenomata had proved so formidable and fatal as to disincline the profession from adopting them as a common surgical procedure. The time that has since elapsed has added but little to our resources. Normal ovariotomy (Battey's operation) promises much in small tumors, of this class, but how few in private practice can be induced to submit to an operation which is not without its risk, and which carries with it the prospect, repugnant to the female mind, of being unsexed. Immediate extirpation, with or without the uterus and its appendages, had proved so formidable and dangerous, that it was relegated to the place of heroic measures *en dernier resort.* The method which I had devised and carefully elaborated in my mind appeared to me to promise certain destruction of the growth with but little if any more danger than is incurred in laparotomy for normal ovariotomy.

The operation is as follows:—

After the usual primary incision of the abdominal walls through the linea alba, I proposed (*a*) to cut in the line of the original incision, through the capsule of the tumor; (*b*) to enucleate and remove so much of the fibroma as was convenient to the operator, and as could be done without endangering the patient from hemorrhage or shock. The amount thus removed being immaterial, as the taking away of a small portion assured the destruction of the growth as effectually as of a large; (*c*) to include the two incisions in the same sutures, and thus secure agglutination of the peritoneal surfaces; (*d*) after the expiration of a certain time, say from 24 to 72 hours, as the indications demanded, to remove so many of the sutures as were necessary to give free access to the cavity of the capsule; (*e*) by the combined use of therapeutical (ergot) and mechanical measures (the instruments and fingers of the surgeon), to remove the fibroma from day to day, *piecemeal*, as it was loosened and thrust forward by the contraction of the sac; (*f*) when this was accomplished pare the edges and close the external wound.

I claimed that by this course the operator would secure—

1. The shortest possible incision of the peritoneum. No mean advantage, since statistics show that the danger in laparotomy is greatly increased by extending the abdominal incision.

2. Total exclusion of blood or irritating discharges from the abdominal cavity by the early agglutination of the peritoneal surfaces. This reduces the risk of peritonitis to the minimum.

3. Absence of severe hemorrhage, excessive shock, and the necessity of exposing or handling a great extent of peritoneal surface. This avoids the principal factors of danger in all operations for rapid extirpation of these tumors.

4. Facility of access to the tumor. The surgeon has it directly under his eye and can ensure (*a*) The prompt removal of the mass as fast as it

is loosened from its capsule. This anticipates and prevents decomposition. (*b*) Thorough antisepsis, drainage, and, if necessary, irrigation of the sac. This removes almost all risk of septicæmia. (*c*) Perfect control over all tendency to hemorrhage. (*d*) Rapid extraction and removal of the fibroma by the mechanical and therapeutical resources of the surgeon.

I was urged by Dr. Atlee to carry my views into practical effect. He thought that my theory was good, and that it might prove a valuable resource in surgery.

About one year after this conversation I operated in this way upon a case which presented the most unfavorable features. The patient recovered perfectly and her life was prolonged for some years, but I learn that she has since died from an attack of acute pneumonia. An accident destroyed my notes of that case, and it was never published, but I will briefly state that the tumor was very large, adhesions were very numerous and vascular, and the patient was very anæmic, and so prostrated by weakness and pain as to have been confined to her bed for some weeks.

I believe the subject of sufficient importance to warrant the report of a recent case in detail.

Case xxxiv.—Ann R., age forty-seven, unmarried, American, twenty years ago met with an accident while riding a horse, and has been more or less of an invalid ever since. Catamenia first appeared at the age of fifteen, and have always been regular. Since the accident they have recurred every three weeks, and are very profuse during the first forty-eight hours. Are not accompanied with pain. Two years ago she first noticed a central enlargement of the abdomen, which increased more on the right side as it progressed. This growth has been continuous, and during the past six months has been very rapid. There has been a great deal of abdominal pain and soreness, but no history of local or general peritonitis. Her bowels move every day, but a sense of obstruction renders defecation difficult and unsatisfactory. The kidneys have long been in an unsatisfactory condition. The secretion of urine is scanty and she has been accustomed to use stimulant diuretics and gin to increase the flow. Appetite fair. Stomach digests reasonably well. She has œdema of the lower extremities, is anæmic and emaciated, especially about the face and upper portion of the chest. A very large and very elastic tumor fills the abdomen and pelvis. The elasticity is so great as to give a decided sense of fluctuation, which is especially marked when abdomino-vaginal palpation is practiced. The uterus is four inches in depth; is movable, but does not move with the tumor.

Diagnosis doubtful. Probably, a fibroid. Possibly, an adenoma of the right ovary. The latter was the decision reached by the physician whom she had previously consulted. Patient was anxious for relief by operation, and was placed on treatment preparatory to that end.

Operation.—October 31st, 1881. Present: Doctors Kebler, of Corry; Blaine, of Pleasantville; Farrelly and Heath, of Townville; Moody, Barr, Young, and Reilly, of Titusville.

The strictest antiseptic precautions were observed as regards room, attendants, instruments, and dressings. But the spray was not used. In surgery of the abdominal cavity "fort dem spray" has been my motto; and a reasonably large experience has not yet given me reason to change my views.

The patient being anæsthetized, the usual abdominal incision was made through the linea alba, about three inches in length. This was afterward extended about two inches upward toward the navel, and one inch downward toward the pubis. The tumor was found to be a fibroid. An incision of five inches, in the line of the external incision, was made through the capsule of the tumor. The capsule was found to be about three lines in thickness over this portion of the tumor. The part immediately presenting was rapidly enucleated, and removed with knife and scissors. At the upper edge of the capsular incision a venous branch was divided somewhat longitudinally, and as it threatened to be troublesome, was secured by a silk ligature, passed through the capsule. It would have been easy to have enucleated and removed a very large portion of this tumor, as the hemorrhage was insignificant, but at this point the patient showed such marked evidences of intolerance of ether that the anæsthetic was withdrawn and the operation was brought to a rapid close.

The wound was closed with ten sutures of silver wire, passed as follows: Through the wall of the abdomen on one side, then through the capsule of the tumor on the same side, and, reversing the direction, out through the capsule and abdominal wall on the other side. By this course, escape of the contents of the sac was prevented, and speedy agglutination of the opposing peritoneal surfaces assured. The external incision was further secured by six superficial sutures of black silk; the wound dressed antiseptically, and the patient removed to the bed.

Owing to the want of tolerance of the ether,

and so much of the operation being performed during consciousness of the patient, the shock was very great, more marked than in any of my ovariotomies, except one case of sarcoma of the ovary with chronic peritonitis and ascites. Reaction was, however, quite rapidly established, being apparently complete by midnight. The operation occupied about forty minutes, and was completed about 11.30 A.M.

At 6 P.M., the patient vomited, and blood freely oozed from the abdominal incision. I removed three wire sutures from the centre of the incision, cleaned out the sac, and packed it well with styptic cotton. The wound at this point was now left open, but supported by plaster. I was troubled with no more bleeding.

Nov. 1st, 8 A.M. Patient slept well most of the night; pulse 78; respiration 24; temperature normal; reaction fully established; is very cheerful; passed the catheter and obtained ℥ ij of urine, which is all that has been secreted since the operation. 5 P.M. Suppression of urine complete. Ordered pil. digitalis comp., one every two hours; free draughts of infusion of pumpkin seed and flaxseed, with spts. juniperis, as a stimulant; also quinquinia, 3 grains every six hours.

November 2d, 8 A.M. Suppression of urine continues complete; slight evidences of uræmia. Torpor, dullness, and slight jactitation when sleeping. To omit the digitalis pills, and take, every two hours, ℥ j of an infusion of fol. digitalis ʒ ij, fol. buchu ℥ ss, potass. nitratis ʒ ij to the pint. Apply a poultice of digitalis leaves and ground flaxseed to the back; also parvules of calomel, gr. $\frac{1}{20}$, every hour. Pulse 95. Temperature 100.

9 P.M. Got ℥ ij of urine. Patient brighter.

November 3d, 8 A.M. Drew off 8 ounces of urine. To omit the poultices and the calomel parvules; continue the infusion, ℥ j every six hours. During the day the kidneys continue active, and the condition of the patient steadily improves. Uræmic symptoms rapidly disappearing.

November 14th, 8 A.M. Had a good night. Pulse 85 and strong. Temperature 99. Complains of borborygmi and distention of the bowels. I removed, with knife and scissors, several large pieces of the fibroma. From this time until the termination of the case, daily, and sometimes twice a day, I removed the tumor as it was loosened and thrust toward the abdominal opening by contraction of the muscular fibres investing the capsule, in masses varying in amount from a few ounces to three and four pounds at a sitting. The amount removed each morning and evening depended partly upon the facility of removal, but principally upon the tolerance of the patient. I always stopped when she complained of fatigue, no matter how strong was the temptation to continue, as I was determined not to hazard any portion of her small stock of strength through my impatience to dispose of the tumor. The freshly incised surface of the fibroma was always dressed with ferri per sulph., to prevent oozing of blood, together with antiseptics. Until I reached the base of the tumor the bleeding was insignificant in amount; and at no time was there any discharge of pus from the sac. The discharge from the capsule was thin and sanious, small in amount and almost entirely devoid of odor, unless the removal of the loosened portions was too long delayed.

November 5th. Complains so much of flatulence and distention that I order a mixture of cascaris, rhei et sennæ, and belladonna, which produced three easy movements and gave great relief.

November 10th. An active bilious diarrhœa set in; she had eight motions in the twenty-four hours. None of the evacuations were watery. Kidneys active. I decline to interfere with the catharsis, looking upon it frequently as "critical" in these cases, and to demand interference only when the strength of the patient is impaired by it.

November 12th. Tongue red and dry. Pulse 95. Temperature 101. A good deal of nervous irritation. Bowels moved twice in the twenty-four hours; dejecta loaded with bile. Removed between two and three pounds of the tumor.

November 13th. Condition unchanged. Increase the quinquinia to five grains every six hours. Give ℥ j of port wine every three hours.

November 14th. No improvement; very restless. Pulse 100. Temperature 102. Tongue red, dry, and fissured. Removed over four pounds of the fibroma in the morning and more than two pounds at night. I now learn that, without orders, the nurse had discontinued the use of the sedative during the last four days, and that my patient had been "on her nerve" alone during that time. Ordered thirty drops tinct. opii deod. to be given in a clyster and repeated p. r. n.

November 15th. Patient comfortable. Tongue moist and free from redness. Pulse 90 and firm. Temperature 99. This proves that nervous irritation was the main factor in producing the unfavorable symptoms of the last three days.

But a small portion of the tumor now remains a piece about the size of a small orange being

all that could be disposed of to-day. The blood vessels are larger and tend to free bleeding when severed.

November 16th. Patient feeble and disinclined to take nourishment. Tongue moist, clean, and of a natural color. Ordered beer soup, viz., hot ale or beer, sweetened, with a well beaten egg stirred in. Also rectal alimentation with beef tea, egg, and milk. Removed a portion of the tumor, size of a coffee cup, but the vessels are so large that I resolve to use the écraseur in future.

November 17th. Has rallied well and is comfortable.

November 18th. Still improving. While the patient was on the commode, at 1 P.M., there came a slight gush of blood from the sac, which produced some mental shock. The bleeding was easily controlled by the nurse, who is a woman well suited to emergencies. I surrounded a mass of the tumor as large as the bowl of a goblet with the twisted wire of my écraseur. When nearly severed the wire broke and I was obliged to strangulate the mass with whipcord and sever with the scissors. No hemorrhage.

November 19th. Again strangulated and cut away with the scissors.

November 20th. Several small masses thrown off spontaneously.

November 21st. All that remains of the tumor this day removed. A thick fleshy pedicle is all that remains at the bottom of the sac. Sac walls are so contracted as almost to touch, and are only two inches deep.

November 24th. Patient enjoyed sitting up and eating a good allowance of Thanksgiving turkey and trimmings. Can bear her weight on her feet and take two or three trembling steps.

December 1st. Removed with scissors the thick fleshy pedicle, which alone prevents the closure of the sac. No hemorrhage.

December 5th. Pared the edges of the opening in the abdominal walls and brought them together with silver sutures.

From this time the patient gained daily in health and strength, and on the 20th of December took the cars for her home. Cured.

The estimated weight of the tumor thus destroyed was between twenty and twenty-five pounds.

The above procedure is applicable to all those cases which have reached a size too great to render them amenable to destruction by other medication or Battey's operation. No extent or character of adhesions will interfere with the operation, or endanger the result. It is our duty to attack all fibroids which have attained such size as to destroy the health and comfort and threaten the life of our patient. I claim that I have demonstrated how this can be done with comparatively small risk of failure; and although the course proposed offers nothing specially new, or specially brilliant, but is, on the contrary, slow and plodding, yet if the majority of our patients will get well when thus treated, and a large proportion will die when more heroically and brilliantly handled, let us abandon the desire to display our skill, for the sake of winning the gratitude of our patients by prolonging their lives.

FOWLER'S SOLUTION IN THE TREATMENT OF TETANUS.

BY WILLIAM A. BYRD, M.D.,
Of Quincy, Illinois.

In looking over the late treatises on surgery, I do not find any allusion to the treatment of tetanus by the use of arsenic, in any of its forms; not even in the able addition of Dr. J. S. Jewell to Holmes' System, Am. ed. In a conversation with Dr. John T. Hodgen, last fall, he spoke so highly of the use of Fowler's solution in the treatment of tetanus, that I resolved to put it to the test in the first favorable case that presented. December 5th, 1881, George Schell, a robust laborer, presented himself for treatment. Three weeks before he had received a cut with a stave-shaping machine, on the ring and middle fingers of the right hand, cutting off about half the nail, and last phalanx of the middle finger, and splitting the end of the ring finger for about three-quarters of an inch. He had been under treatment elsewhere, and the fingers were coated with a salve that had shrunken in drying, and had cracked open, curling up at the points of fracture, something like shellac varnish does when applied too thickly to any surface. The wounds were very much irritated, and very painful. The sweat was standing upon his skin in great drops; his tongue was heavily coated with a brownish-yellow, pasty mass; he was unable to open his mouth over a quarter of an inch, on account of pain in the masseter muscles. There was pain of a paroxysmal type along the whole of the back, aggravated by a draft of wind or a touch of one of the affected fingers. This pain was so intense that he would at times fall down and cry out with it. When attacked with one of these paroxysms, his head and heels would be drawn backward, but not enough to call it typical opisthotonos. The first two days I treated the fingers with emollient applications to get off the salve that was constricting them, and gave ten grains of chloral hydrate and fifteen grains of bromide of potassium, every

hour, to allay the pain and to correct the spasm. The appearance of the fingers improved under this treatment, but the general symptoms became worse. I then decided to use Fowler's solution, in large doses, as recommended by Dr. Hodgen, with the exception of giving it by mouth, instead of by hypodermic injection. This I did because there was no irritability of the stomach. He was given ten drops of Fowler's solution, every three hours, for forty-eight hours, and the symptoms closely watched. At the expiration of which time he was so much better that he was given the same amount every six hours. He steadily improved until the 16th, when excessive granulations began to spring up on the wounded surface, on the middle finger, and the nervous symptoms began to reassert themselves. There being no abatement, on the 19th, with the assistance of Dr. G. Connell, I amputated the middle finger at the middle of the first phalanx. All went well until the 22d, when there was found an abscess in the middle of the palm of the hand, requiring to be opened. Upon making the opening there came out a piece of white, swollen, macerated nerve, about one-fourth of an inch in length. When dressing the wound the next day, another piece about the same size came away, and the next day a piece about half an inch in length came away. From this time on he made a speedy and satisfactory recovery. Although amputation had to be resorted to in the end, yet the arsenic exerted so prompt an effect for the better, when chloral and bromide of potassium had failed, that I am satisfied that it deserves all the praise bestowed upon it by Dr. Hodgen, who credits Dr. A. S. Barnes, of St. Louis, with having suggested its use to him many years ago. Any of my readers who desire to read an account of it, written by the doctor himself, will find a very interesting article in the St. Louis *Courier of Medicine*, for December, 1880, p. 519. To Dr. G. W. Connell my thanks are due, for assistance and counsel throughout, in the treatment of this case.

February 10th, 1882.

Hospital Reports.

PENNSYLVANIA HOSPITAL.

SERVICE OF DR. LEVIS.

Reported for the Medical and Surgical Reporter by Richard Douglas, M.D.

Inflammatory Hypertrophy of Legs.

This is one of the most obscure cases that I have ever met. There are certain symptoms connected with the case which indicate the general condition, but do not proclaim a diagnosis. This boy was admitted to the hospital some months since; at that time his condition was about as it is at present, exhibiting the greatest constitutional debility, accompanied by this most peculiar local condition of the lower extremities. The knee joints were enlarged, excessively painful and pitted upon pressure, while the entire surface of the legs was rough and scaly, and the slightest movement gave rise to intense pain. This condition had been developing about two years, and could not be attributed to any special cause. Upon the history and the symptoms presented, after a careful study of the case, the resident surgeon considered it elephantiasis, and has treated the patient for that disease.

First. He has endeavored in every way possible to build up the generally depraved condition of the patient. The local treatment consisted in elevation and support of the limb, and iodine applications were for a time used. Now, while I cannot agree with the doctor in his diagnosis, I certainly indorse his treatment as being the only rational plan that could be pursued. When I first saw the patient, I deemed the end near at hand; but under the supporting treatment life has been prolonged several months, though I cannot see that there is any manifest improvement either in the local or general condition. My reasons for not considering the case *elephantiasis*, are briefly as follows: Elephantiasis is by most pathologists considered an inflammatory disease, affecting chiefly the lymphatics, obstructing their calibre, preventing the return of lymph to the *thoracic duct*, causing an exudation of that fluid, which becoming organized gives rise to great hypertrophy of the cutaneous, subcutaneous, and connective tissue. The vessels become enormously hypertrophied, hence the profuse bleeding attending operations upon structures thus affected. The extremities bear a striking resemblance to the legs and feet of an elephant; hence it takes its name. Such is, briefly stated, the pathology of elephantiasis. You must see how widely it differs from this case. Here we have some enlargement, it is true. The skin, though changed in hue, does not present the hypertrophic characteristics of elephantiasis. Therefore, I do not hesitate to say this is not a case of that nature, though in many points closely resembling it. But, gentlemen, if it is not that disease, what is it? No doubt it is due to some interference with the lymphatics. What that trouble may be, I am unable say. My friend, Dr. Little, of London, England, who is present, may be able to enlighten us.

Dr. Little being called upon, made an examination of the patient, and then addressed the class:—

Gentlemen! To me this is certainly an anomaly. When the case first came in, I at once thought it one of rheumatoid arthritis. But upon learning the history, and by an examination, I have changed my views entirely. It is not rheumatoid arthritis, nor is it elephantiasis. It is a condition too complicated to admit of an easy diagnosis; the great disorganization that has here taken place transcends the limit of almost any one disease. Dr. Levis is no doubt correct in attributing the trouble to the lymphatics. If the general condition of the patient was better, the surgeon would be justifiable in resorting to double amputation.

Five weeks later he was again brought before the class. The following remarks relative to his condition were made by Dr. Levis:—

When this case was before you upon a previous occasion, we found it impossible to arrive at a diagnosis which would warrant us in taking any active measures. He is before you again this morning, and while I cannot see any appreciable change in his general condition, there have been certain local developments which render the pathology clear. This boy is of syphilitic diathesis. I regard this deplorable state the outcome of that disease. You notice the great deformity of the legs; they are both enlarged, out of all proportion, pit upon pressure, are covered with a serous exudation. Should we confine our examination to the lower portion of the limbs we would be at sea for a diagnosis; might possibly call it elephantiasis. We have but to examine the knee joint, and the mystery explodes. You at once notice the great prominence anteriorly. So, likewise, a smaller posterior prominence, which, if examined closely, is found to be, in general contour, much like the head of the tibia, in fact, that is just what it is. The anterior prominence is the lower end of the femur, which, under the action of disease, has become enormously hypertrophied, and then, under muscular and other influences, the tibia has been partially luxated backward. This hypertrophied bone has encroached upon the vessels, especially the lymphatics and veins, occluding their calibre and thus preventing the flow of their contents back into the economy, hence there has been a continued exudation and organization of lymph; in this way the pathology resembles, somewhat, elephantiasis. But here it is dependent upon purely a mechanical cause. There is also, probably, nerve pressure. There is no possible way of obtaining relief, save by resorting to amputation, above the seat of disease; it is true, the patient is in a most deplorable state, but it must be obvious to all present so long as the cause of the disease remains there can be no improvement. Amputation gives the boy a chance for life, and I shall at once submit him to it.

The patient being thoroughly anæsthetized, an Esmarch's bandage is applied to each limb, from the foot up to the middle of the thigh; just here we apply the rubber band; this thoroughly constricts the parts and will enable us to complete the operation without loss of blood. I shall amputate above the junction of the lower with the middle third. It is a matter of small consequence what form of amputation we choose. I generally prefer the antero-posterior flap operation in this locality. The method of procedure is as follows: Grasping the limb about the centre of its circumference, with the left hand, and fixing the thumb and index finger at opposite points, as guides, with a long scalpel in the right hand, I make a curvilinear incision from point to point. The curve, of course, must be directed with its convexity downward, and will vary in accordance with the desired length of the anterior flap. I always prefer a long flap anteriorly, and a proportionately short one posteriorly. This first incision must extend down through the superficial parts to the muscles. This flap, consisting of cutaneous and connective tissue, is dissected back about three-fourths of its length. We then, with a circular sweep of the knife, divide the muscles at this point, thus cutting through the vessels transversely. The bone is next sawed through. The stump is dressed in the ordinary manner, and after washing out all clots and debris with carbolized water, with a Davidson syringe, the operation is complete. Both limbs were treated in the same manner.

Infra-Maxillary Neuralgia.

This woman, aged seventy years, is a great sufferer from neuralgia in the infra-maxillary region. You are aware that all tissues of the body, in the old, undergo somewhat of a retrograde metamorphosis. The vessels take on calcareous or fatty degeneration. The muscles become attenuated; the intimate structure of the bones is changed; they lose, to a certain extent, their animal constituents; the lacunæ and canaliculi are obliterated by the deposit of earthy salts; thus they are deprived of their vitality, become fragile, and are rendered liable to disease and injury. These senile changes are, perhaps, more manifest in the inferior maxillary than in any other bone. You know the greater portion of that bone is composed of soft, cancellous structure, with large alveoli for the reception of the teeth. In the old the teeth fall out, the alveoli become obliterated and the bone shrinks in size. The canals through which the minute branches of the dental nerve ramify, becoming partially obliterated, the terminal filaments of the nerves are pressed upon, giving rise to intense suffering. The neuralgia attending organic lesion to the nerve itself, or arising from the pathological condition referred to, is constant in character, and differs markedly from the intermittent form of the disease depending upon malarial or other influences. Organic neuralgia (so to speak) for a long time baffled the skill of the profession, but within the last quarter of a century it has been found a cure can only be effected by a complete excision of the nerve affected; this operation has been practiced by many, to quite a bold extent, and has been frequently followed by miraculous results. I have performed it in quite a number of rare cases, with most satisfactory results, but have always met with one great difficulty, the tendency of the divided nerve to unite, and thus establish the same old trouble. In exsection of nerve trunks, I have not only removed some portion of the cord, but have taken the precaution to turn the divided ends back into the muscular tissue, hoping in this way to cut off all possible chance of reunion; but even in these cases I have been surprised, in cutting down upon the part, later, to find the divided ends had come together. Therefore, I repeat, in order that the operation may be followed by permanent cure, complete excision of the affected cord is required. One year ago this old woman came under my care suffering with infra-maxillary neuralgia. I decided to excise the affected nerve, and performed the operation as follows: A curvilinear incision, about two inches in length, with convexity downward, was carried over the ramus of the jaw; the flaps thus made were dissected up, the bone laid bare, the trephine applied, and a disk of bone was removed, the dental vessels

and nerves exposed in their canal; the nerve was raised on a hook, and pulling backward, about one inch of it broke off in the canal and was cut away. The parts being washed thoroughly with carbolized water, the flaps were brought into close approximation, the ordinary dressing applied, and the operation completed. The wound healed by first intention, and for ten months the patient was entirely free from neuralgia. Two months ago the trouble returned. She is here to-day, in the hope of again obtaining relief. There is no doubt in my mind, that new nerve tissue has been formed to supply the gap made by the excision one year ago, and the impression made upon the sensory filaments is conducted uninterruptedly back along the cord. I shall to-day perform a more thorough excision; attempt to expose the nerve at its entrance into the dental foramen, and remove the entire portion lying in the canal. The infra-maxillary nerve makes its exit from the skull through the foramen ovale, and enters the inferior maxillary bone on the inner surface about one inch below the sigmoid notch, one inch and a quarter above the angle, and a quarter of an inch anterior to the posterior border of the ramus. Now, I wish to expose the nerve just above this point, as it lies upon the bone before entering the foramen. In order to reach it we would ordinarily apply the trephine. To-day I propose using the dental or surgical engine, as it is called. This engine, an ingenious invention of Dr. Bonwill, a dentist of this city, has proven of much value to the surgeon in operations upon bones. The feature of the instrument consists in a spindle, which, by means of a somewhat complex arrangement of wheels, is made to revolve many thousand times per minute; to this spindle you can attach the instrument most desirable for the purpose to be accomplished. For the operation of trephining, Dr. J. B. Roberts has modified the ordinary burr used by the dentist, and has fashioned a burr which presents two cutting surfaces, one on the flat end and the other on the circumference. It strikes me that this is particularly well adapted for trephining. Commence by making a groove with the edge, and as it cuts its way we turn the flat end directly down upon the bone: we are thus enabled to perforate the bone in much less time than is ordinarily required in manipulating the ordinary trephine. The advantage of having the cutting edge upon the circumference is, that by means of it we are enabled to enlarge the opening laterally to any desired extent. I shall apply it to this bone, and you will see how excellently it serves our purpose. Having removed a circular portion of bone, about one-third of an inch in diameter, I now enlarge the hole laterally and search for the dental nerve. Our calculations were correct; here it is, exposed, just at the foramen: grasping the nerve with my forceps, I pull it out from the canal, with my scissors cut away this portion (about two inches in length). The approximal end I stretch well, a procedure I think of much value in all operations upon nerves. You notice, gentlemen, there is a rupture of a small artery. This will not require ligation; the hemorrhage is readily controlled by pressure with the hand in the mouth, or by plugging the hole with sponge. Having removed all debris, cleansed the part thoroughly with carbolized water, and adjusted the flap by silver sutures, the operation is complete.

WESTERN PENNSYLVANIA HOSPITAL, PITTSBURGH, PA.

Reported by V. KERSEY, Resident.

Three Cases of Tetanus.

CASE. 1.—Wm. McF., aged 35, single, a moulder by occupation, of temperate habits, with history of previous good health, was admitted to this hospital, May 29th, 1881, with a crush of the right hand. The hand was run over by the wheels of a passenger railway car, and the palmar portion and all the fingers, except the proximal phalanx of the index, and the thumb, were crushed. The integument of the palm retained its connection with that of the forearm by a slender pedicle of integument.

Dr. C. B. King decided to make an attempt to save the hand. The fragments of phalanges were removed, the extremities of the bones rounded off, with bone-pliers, and a few sutures of fine silver wire introduced. The hand was then enveloped in warm cloths, and grain ¼ of morphia sulph. administered hypodermically.

June 1st. The palmar flap is of a very dark color, and a distinctly gangrenous odor is observed. The hot applications are continued. Temperature and pulse normal.

Upon June 4th, the flap was dead, and was clipped away with scissors. Patient complains of stiffness and pain on opening the mouth. Was ordered gr. xx of chloral hydrate, every third hour.

June 5th. Marked rigidity of muscles of posterior-cervical region; complains of headache and lumbar pains; bowels open; takes liquid nourishment freely. The jaws cannot be separated further than one-fourth of an inch.

A secondary amputation of the member was decided upon. This was performed, by the flap method, at the middle of the forearm. Vessels secured by torsion, and dry dressing applied.

June 6th. Rigidity increases; lies upon his side, with head thrown far back, and trunk arched forward; had two or three mild exacerbations of rigidity, succeeding paroxysms of coughing.

During these increases of rigidity the breath came hard between the set teeth, the respirations were shallow and irregular, and he complained of pain. Increased chloral to gr. xxx, every two hours. The patient had no more well marked spasms than those described above, but the general rigidity steadily increased. The jaws became inseparably locked at about 3 P.M., and continued so until his death. The death occurred at 3.30 A.M., June 7th, nine days after receipt of injury, and five days after onset of tetanic symptoms.

CASE 2.—Benjamin F. C., aged 18, single, brakeman, of temperate habits and previous good health, was admitted June 21st, 1881. This man had suffered, twenty-five minutes before admission, a crush of the right lower extremity to within six inches of the trochanter major, a loaded car or two having passed over the limb. Within one hour of the time of receiving the injury the member was amputated by Dr. James

McCann. After securing, by ligature, the femoral vessels, in the wound, lateral flaps were formed and the bone sawn across, about three inches from the trochanter major.

The wound was closed by silver wire sutures, a dressing of resin cerate and dry absorbent cotton was applied. External heat was applied, and half a fluid ounce of whisky, with thirty minims of aromatic spirits of ammonia was administered every two hours.

June 23d. Some gastric irritability being present, the stimulants were withdrawn, and the amount of beef tea and milk was increased. The bowels moved freely, and patient is quite rational.

June 26th. The stump was examined to-day for the first time; the edges were adherent throughout most of the extent, though at two points small superficial sloughs appeared. Complained of pain and stiffness in the jaws. The brow was corrugated; the sterno-cleido-mastoid muscles were abnormally prominent and tense. Ordered grs. xxx of potassium bromide, every third hour; also a large, hot poultice of flaxseed meal to envelope the stump.

June 27th. The rigidity of the muscles steadily increased, extending to the abdominal and dorsal, and muscles of arm and forearm. He had no convulsions. During the last few hours of life he was unable to separate the jaws enough to admit the ingestion of anything in the shape of food or medicine. He died quietly, six days after receipt of injury, and forty hours after onset of symptoms.

Examination of stump after death showed, 1. Large, bulbous and congested end of sciatic nerve. 2. The branches of the anterior crural, and the trunk of the sciatic were ecchymosed and softened. The vessels presented no features worthy of note.

Case 3.—Wm. F., aged twenty-three, single, brakeman, of temperate habits, with no history of previous injury or sickness, was admitted, September 13th, 1881, with the following history: Four days ago he was coupling cars, and had the index and second finger of the left hand crushed between the "drawheads." The second finger was amputated at once, but efforts were made to save the index finger.

When admitted to the hospital, he had recived no attention, except that bestowed at the time he received his injury. The finger, when divested of the dressings, was found to be in a state of gangrene. Hot flaxseed meal poultice was applied and patient placed in bed. The next day Dr. J. B. Murdoch ordered the hand to be placed in a hot water bath, except at night, when it was to be placed in cloths wrung out of hot water.

September 19th. A line of demarcation having been formed, the finger was amputated at the metacarpo-phalangeal articulation, wound closed by silver wire sutures, and dressed with dry absorbent cotton. In ten days (September 29th) the stump of index finger was healed, and that of the second finger nearly so.

October 1st. The stump of index finger has a small abscess upon one side, which was opened to-day; a small amount of sanious pus escaped.

October 3d. Stump of second finger healed; abscess on stump of index finger nearly closed.

October 4th. Patient has been up and about the ward for past eight or ten days. Complains, to-day, of stiffness and soreness of the muscles of jaws, neck and back. Pain on mastication and deglutition, and on attempting to bend the trunk. He was ordered to bed, and a hot poultice placed about the entire hand. Gave him grains x of chloral hydrate and grains xx of potassium bromide, every three hours.

October 9th. Complains of moments of smothering, during which he is compelled to sit erect in bed to get his breath. Jaws are rigid; cannot be separated wider than a quarter of an inch. Mental faculties are dull. Owing to the fact that he had not been sleeping well, he received one grain of powdered opium, and in two hours the dose was repeated. He got no sleep, however. The bowels were maintained in a loose state, by daily administration of comp. cathartic pills.

October 11th. By order of Dr. Murdoch, the hand was immersed in the continuous hot-water bath (105° Fahr.). Dose of chloral and of bromide increased, the former to xx grains, the latter, to grains xl.

October 16th. The rigidity has almost entirely disappeared. Patient sleeps very well, and time between doses of bromide and chloral is lengthened from three to four hours. Bowels are freely moved every day.

October 23d. Removed the hand from water bath, and allowed the patient to get up and move about, within doors.

It is now nineteen days since the symptoms and signs of tetanus were noticed in this case.

November 26th. During past four weeks the patient has received no medicine, except an occasional purge.

November 28th. He is discharged cured.

In connection with the foregoing cases, the following points are considered worthy of note: 1. Absence of a well-marked convulsion. 2. Absence of fever. 3. The difference in treatment.

Abortion Without Pain or Hemorrhage.

Dr. William Girdner, of Greenville, Tenn., relates the following unique case in the *Medical Gazette*, November 26th, 1881:—

Martha G., aged twenty-seven years; married; multipara; pregnant about nine weeks. About six o'clock on the morning of October 20th, when entering the dairy door, it fell from its hinges, and knocked her to the ground. She got up, feeling no injury, and went about her household duties as usual.

About five o'clock the same afternoon, when in the act of micturition, a fœtus dropped from her, about the size of a small mouse, the act being wholly unattended by pain or hemorrhage.

About three hours later the secundines came away without hemorrhage, and with only a slight trace of pain. I saw her on the 22d of October, two days after the abortion, and she expressed herself as well as usual. There has been no discharge of any kind from the vagina to indicate rupture of the attachments of the contents of the impregnated uterus, nor have pain or any other symptoms been present as evidence of this interference with the physiological process of gestation.

EDITORIAL DEPARTMENT.

PERISCOPE.

Filaria Sanguinis Hominis.*

From the London *Lancet* we note that in the twenty-first issue of the Chinese Customs Medical Reports, Dr. Myers records some further interesting observations concerning the filaria sanguinis hominis, made in the island of Formosa. It seems that although this island is only separated from the main land, where filaria disease abounds, by a channel 180 miles wide, three cases only of elephantoid disease have presented themselves in nine years among 15,000 general hospital patients, and the three filaria infested persons Dr. Myers saw all came from the main land (Amoy and district). This fact, that the disease does not spread in the island, as Manson conjectured it might have done into Barbadoes, is the more remarkable, as communication with the main land is constant, and there is an abundance of mosquitoes, so that Dr. Myers surmises that the particular species of mosquito which is the true intermediary host of the filaria exists on the main land, and probably not on the island. He is at present carrying out a systematic investigation of the different species of mosquito. First, Dr. Myers put a conveniently willing and infected man to sleep in a gauze-covered mosquito house, into which he turned mosquitoes collected promiscuously from all parts of Formosa. These gorged insects he examined day by day, and found that the next morning after their feed they contained several lively embryos, which at later date became digested, and had evidently not got into their true host, for Manson has found that mosquitoes containing filaria sanguinis hominis, when fed on an infected dog, digested the filariæ of the latter. Secondly, Dr. Myers has also made some observations on the periodicity of the appearance and disappearance of the filariæ embryos in respect of the blood circulation, in the case of a man suffering from glandular swellings and recurrent lymphatic fever, but otherwise healthy. The tables given show a result in complete accord with Manson's observations. The embryos appeared in the blood circulation regularly between 6 P.M. and 8 P.M., generally a little after 6 P.M., and were present in greatest numbers about midnight, after which they gradually decreased, and pretty well disappeared by 6 A.M. to 8 A.M. This period of twelve hours is just the time that, as Manson has shown, the mosquito is in active search for food. Thirdly, Dr. Myers tries to make out what becomes of the embryos when they disappear from the blood circulation, whether this disappearance is final as regards the swarm, and caused by death, or whether they only lie dormant for the time, perhaps in some viscera, as the lungs. He made prolonged and careful observations on the condition of the embryos at the times of their appearance in the circulation and their disappearance, and he found that the most marked and unmistakable contrast existed between their excessively active, vigorous condition at the former time and their increasingly torpid and feeble, shriveled, straightened out state at the latter time. He thinks the disappearance is final as regards the swarm, and he further argues that unless the parent or parents breed only once, or at long intervals, the circulation would get almost blocked by the myraids of filariæ if there were not some more wholesale method of removal than mosquito sucking. Dr. Myers suggests the possibility of the diurnal solution of dead embryos. Fourthly, Dr. Myers watched the behavior of the embryos with such substances as bisulphate of quinine, salicylic acid, arsenious acid, and santonin. The quinine affected them most, but the upshot of the matter is that the quantity of any of these substances necessary to kill the embryos would kill the host also. The problem, therefore, seems to be how to diagnose the exact situation of the parent worm (generally lying in the superficial glands) with an accuracy sufficient to extract it.

Cardiac Hypertrophy and Renal Disease.

Apropos of this interesting subject the *Lancet* says:—

The problem of the subordination of cardiac hypertrophy to renal disease, when the two coexist, to which so much discussion has been lately devoted, has engaged the attention of M. Straus, of Paris, who has published in the *Gazette Médicale* a preliminary account of his experimental results. The difficulties of the problem of the relation of the heart to the kidney lesion depend upon the complexity of the morbid conditions present in the system. These are much simplified in an experimental inquiry, although the results thus obtained have not always been very decisive. It is difficult to preserve for long the life of animals after a lesion of both kidneys, and Straus has therefore contented himself with causing atrophy of one kidney by ligature of the ureter. Previous experiments of the same kind have yielded contradictory results. Simon, Rosenstein, and Gadden, observed no cardiac consequence; Beckmann, Grawitz and Israel, and Lewinsky found a resulting hypertrophy of the left ventricle. The experiments of Straus were made on twenty guinea pigs, which were killed from four to six months after the operation. A pure hypertrophy of the left ventricle was found to be the invariable result. The average weight of the heart, for instance, in three cases was 2.76 grams, while that of three healthy animals was only 2.25 grams, and this although the average weight of the guinea pigs operated upon was two hundred grams less than that of those selected for comparison. The hypertrophy was uncomplicated by any degeneration of the muscular substance of the heart, and was apparently the direct result of the atrophy of the kidney, since the arterioles in various parts were examined and

found to be healthy. Grawitz and Israel asserted that although cardiac hypertrophy might follow a renal lesion in old animals, in which the other kidney did not sufficiently overgrow to compensate for the loss, this result was not to be obtained in young animals. This statement is disposed of by the experiments of Straus, since nearly all the guinea-pigs he experimented upon were young. Moreover, he was unable to observe any inverse relation between the degree of hypertrophy in the heart and kidney, such as should obtain if the conclusions of Grawitz and Israel were correct. In one of the cases in which the increase in weight of the heart was greatest, the remaining kidney had increased to at least double the normal weight. An objection which is often urged against the dependence of cardiac hypertrophy on renal disease is the absence of such hypertrophy in cases in which the kidney suffers in consequence of an affection of the urinary passages. But Straus relates, to show that hypertrophy may be found in these forms, two cases of women dying from uterine cancer which had compressed the ureters, and had caused dilatation of the pelves of the kidneys and very marked renal lesions. In each there was considerable hypertrophy of the heart without any valvular lesion. In a discussion on this paper at the Société de Biologie, an interesting and apposite case was related by Quinquaud. A man of twenty-eight years of age was shot in the left lumbar region, and recovered after an illness attended with hæmaturia. At this time there was no hypertrophy of the heart, but distinct evidence of this was discovered two years afterward. He died with symptoms of uræmia four years later. The left kidney contained an old abscess, the right was hypertrophied, and the heart was increased in weight to eighteen ounces, in consequence of hypertrophy of the left ventricle. All the liquids of the body were found to contain a large excess of urea.

A Case of Rupture of the Bladder.

T. J. Call, M.D., M.R.C.P. Edin., contributes to the London *Lancet* the following case:—

J. R., a chimney-sweep, between fifty and sixty years of age, had for a long series of years suffered from stricture of the urethra, through which, and only by dint of coaxing, a No. 3 was the largest size of catheter which could be passed. Although this stricture was the cause of frequent complete retention of urine, and at the best of times water could only be passed through it in a very feeble stream, he would not consent to have any operation performed for its relief, nor would he attend with sufficient regularity to have it gradually dilated. He was content to go on as he had been doing for over twenty years, and to present himself in the out-patients' room once in every week or two, in order to have his bladder relieved.

One afternoon I happened to be passing his house when his wife called me in. I found him walking about the room, evidently in great pain, with no other clothing on than his shirt, and his bladder enormously distended; as, according to his usual custom, though repeatedly cautioned against it, he had, in the hope of being able to relieve himself, been drinking freely of gin and spirits of nitre ever since the morning, when the retention had begun. Not having a catheter with me, I told him I would obtain one, and come again. As his house was only about five minutes' walk from the Infirmary, I should be back to him within a quarter of an hour from the time of my first seeing him. I now found him in bed, entirely free from pain, and the floor of the room swimming with water. On asking what had happened he told me, and his wife confirmed what he said, that while walking about, the water suddenly, and without the slightest warning, came, in one great gush, through the anus. That something of the sort must have occurred was evident from the fact that it would have taken more time than I had been absent for the large amount of urine to have dribbled through the stricture; besides, there was both his own and his wife's testimony to the fact, and there was no reason why they should deceive me. Fearful of the consequences of urinary infiltration, I enjoined perfect rest; but the next morning I found him going about as usual, quite well, and voiding urine in the manner to which he had been so long accustomed.

Just one week after this I was asked to visit him, and again found him suffering from retention. This time, however, I was unable to pass the catheter, and, as he was suffering frightful pain, I got Dr. Easton, one of the visiting surgeons to the Infirmary, to see the case with me. Together we were unable to introduce any, even the smallest, instrument into the bladder, though we overcame the stricture so far that the urine began to flow and give him relief. Little over a week and again he presented himself in the out-patients' room, this time to have the catheter passed without the slightest difficulty; and ever after, so long as he remained under my observation, the operation was easily performed.

I may add that, from first to last, I was never able to detect any enlargement of the prostate. The interesting points in this case are the rupture without any infiltration of the cellular tissue, and the rapidity and completeness with which the rent had healed so as to withstand every effort to empty his bladder made by a powerful, muscular man.

Can a Man have Syphilis Twice?

The *British Medical Journal* reports the following valuable remarks by Mr. Jonathan Hutchinson, on this interesting topic:—

The man whom we have just seen offers a remarkable example of the occurrence of a second chancre soon after the first. His second sore has been, as I have repeatedly demonstrated, characteristically indurated. He is quite candid, and makes no doubt that this sore was the result of contagion. Yet it is barely a year since he had his first chancre, and this was followed by an eruption, of which he had scarcely got clear when this second sore occurred. The case is proof that a man may have an indurated sore on the penis within a year of a former one, but it is not proof that he may have syphilis twice, for this patient has not as yet had any constitutional symptoms as the result of the last chancre. If,

however, you ask me for an answer to the general question, Can a man have true, complete syphilis twice? then I must reply clearly that he can. Such cases are rare—as rare, perhaps, as examples of second attacks of smallpox—but they do occur. I am at present attending a gentleman who has a terrible phagedenic chancre and rupial eruption, and who unquestionably had complete syphilis, chancre, sore-throat, and rash, seven years ago. I have also a second case under care, very much milder, but illustrating exactly the same fact, with almost precisely similar dates. Second chancres are, however, far more common than second attacks of constitutional syphilis. Many of them are the result of fresh contagion, but seem to have no power to produce constitutional symptoms; but others are not from contagion at all, but form in connection with a taint still remaining from the first attack. It is a most important fact that indurations may form in the penis, in every respect exactly like Hunterian chancres, not distinguishable in any way, and yet they may be merely recurred sores, and the products of constitutional taint. I have seen this over and over again; and M. Alfred Fournier, of the St. Louis Hospital, has written a very instructive paper on this form of sore. In the case of our patient, it is obviously impossible to say, after the statement which I have just made, whether or not his present sore is the result of fresh contagion. It may simply be a relapse, or it may be a gumma. He, however, confesses to exposure; and, as the sore followed in due course, it is probably true that he was afresh inoculated. Second attacks of syphilis are sometimes, as in the case just mentioned, very severe. The same has, I believe, been occasionally noted in recurred attacks of variola. As a rule, however, they are mild, or even abortive. Third attacks may even occur; and so may, as we are told, third attacks of smallpox. We must explain such facts, I expect, by reference to individual peculiarity and idiosyncracy, but it is important that they should be known. The belief that syphilis can occur but once in a lifetime is very widely spread among a certain class of the public. I have watched with amusement the change in expression in many a young gentleman's face when he got my reply to his smiling suggestion—"A man cannot, I suppose, have the disease a second time?"

Case of Incised Wound of the Skull; Trephining; Recovery.

Dr. Edward Cotterell reports the following interesting case in the London *Lancet*:—

The patient, aged twenty-one, was thrown from his dog cart, striking his head on a pile of stones. He was seen about three-quarters of an hour after the accident, when he was found, totally unconscious, and suffering from concussion, with some signs of compression. Upon examining his head, I found an incised wound of the scalp in the left temporal region, about two inches and a half long from before back, and on introducing the finger there could be felt an incised wound of the skull about one inch long.

I determined that trephining ought to be done, as there was undoubtedly depression of the inner table of the skull. I performed the operation at once, and on raising the circle of bone cut by the trephine, a loose piece of bone, an inch long and half an inch wide, consisting of the inner table, was seen lying on the dura mater. This was easily taken away through the trephine hole, and consciousness was almost immediately restored. The wound was left quite open, a piece of lint dipped in carbolic lotion being placed over it. The next morning an ice bag was applied to the head and five grains of calomel put on the tongue; later in the day a copious enema was given, with good result. The following is a record of the temperature and pulse: July 10th, 11 A.M., temperature 99°, pulse 60; 3 P.M., temperature 101.2°; 7 P.M., temperature 100.7°, pulse 64; 11 P.M., temperature 101.2°. July 11th, 3 A.M., temperature 101°; 7 A.M., temperature 100.7; 11 A.M., temperature 100.8°; pulse 64; 3 P.M., temperature 99.8°; 7 P.M., temperature 100°; 11 P.M., temperature 100.6°; July 12th, 3 A.M., temperature 99°; 7 A.M., temperature 98.6°; 11 A.M., temperature 99.2°; pulse 60; 3 P.M., temperature 98.4°; 7 P.M., temperature 98°; pulse 48; 11 P.M., temperature 98.4°. July 13th, 3 A.M., temperature 98°; 7 A.M., temperature 98°; 11 A.M., temperature 98.6; pulse 56; 3 P.M., temperature 98.2°; 7 P.M., temperature 98.2°; 11 P.M. 99°. Temperature ever since has remained perfectly normal.

July 11th. Patient had a rather restless night, but toward morning slept well. In the afternoon slept well. July 12th. On visiting the patient this evening the pulse was found to be only 48, very soft and compressible. The whole condition of the patient indicated profound weakness. A mixture was prescribed containing some carbonate of ammonia and chloroform, which appears to have acted very well, as the pulse the next morning rose to 56, and the day after to 64.

The wound healed by granulation, and was perfectly closed by August 7th, one month after receipt of injury. As will be seen, the patient never had a bad symptom after the operation, a result very seldom seen in these serious head injuries. On October 1st, after a holiday at the seaside, the patient resumed his business, and now does not seem any worse for his accident, except that he suffers occasionally from neuralgic pains at the seat of injury.

Wound of Left Lung—An Extraordinary Case.

Dr. L. E. Homles reports the following remarkable case in the London *Lancet*. A miner, aged 31 years, was standing at the bottom of a mining shaft 225 feet deep, when a drill, three feet one inch long, one inch and a quarter in diameter at the bit, and weighing eight and a half pounds, fell from the top. The patient was standing with his shoulders slightly dropped forward. The bit of the drill struck him between the superior angle of the left scapula and the spine, about two inches from the latter, passing downward and forward near the left border of the heart, and emerging at a point on a line with the left nipple and six inches from the centre of the sternum, fracturing the sixth rib, making a wound eight and a half inches in length. The drill passed nearly through, the head seeming to

the man to remain in the region of the left armpit; the point emerging struck the ground, bringing the man to the ground, upon his face. The patient called upon one of the men standing near him to assist in drawing out the head of the drill, and both pulling together succeeded in doing so. The head was much battered, and must have torn the lung and flesh considerably in passing through.

On entering the hospital the patient was bleeding freely, and in a fainting condition. Air, at each expiration, passed with a gush of blood from both ends of the wound. Hæmostatics, consisting of gallic acid and ergot, with stimulants, were freely administered, and the opening temporarily sealed. The bleeding ceased rapidly, but the patient recovered slowly from the shock. Sixteen days after the injury he was able to walk about. He remained in the hospital eight weeks, when he considered himself sufficiently recovered to go to his private boarding house to remain. The wound, or wounds, for it had two open ends, began to discharge matter on the fourth or fifth day, which was very offensive, and became very abundant. For three or four days, once a day, injections of carbolic acid (ten drops to the ounce) were made through the track of the wound, with a common Davidson's syringe. These, feeling disagreeable to the patient, were discontinued, and simple dressings used once or twice daily. The offensive character of the pus soon changed, though the abundance continued for several weeks. The lung has shrunken to about two-thirds its natural size. The respiration at the time of leaving the hospital was 28, and the pulse 90. The wounds ceased to discharge fifty-one days after the accident, and closed, except the lower one, which, with no perceptible opening, merely moistens the dressing during the night. Since leaving the hospital the patient has gained much flesh, and says he feels nearly as strong as ever. There was never any marked pleurisy, and no great amount of fever at any time during his stay in the hospital.

Uræmic Convulsions Treated by Vapor Baths and Chloral—Recovery.

Dr. A. B. Keely reports this interesting case in the *Lancet*. The patient, a lady, aged thirty-seven, thought she was suffering from a bilious attack. Examination revealed the following symptoms: Suppression of urine, with intense headache, nausea and constant vomiting, frequent pulse, and hot, dry skin. She had not passed water for a week. Bowels very constipated. She was ordered a mixture of acetate of potash, spirit of nitrous ether, chloric ether, and water, to be taken every four hours. He also ordered a vapor bath by means of a spirit lamp placed under a cane chair, a blanket being over the patient and a couple of aperient pills, containing colocynth and blue mass, at bedtime. By the next day, neither aperient nor diuretic had acted. The intervals between the diuretic were lessened and the baths given every three hours. Regular vapor baths were subsequently resorted to, because the patient was unable to get out of bed. After the first one, copious diaphoresis occurred, but no urine was voided. The next day uræmic convulsions set in and continued, throughout the day, to grow more and more severe, until on the subsequent morning they were so violent as to render the vapor baths impossible. She was then given one drachm of syrup of chloral and five grains of iodide of potassium in one ounce of water, every three hours. After the first dose the convulsions ceased. The chloral was therefore stopped, but the iodide was continued. Half a drachm of compound jalap powder had no effect on the bowels. This dose was repeated four times, but did not act until an enema was given, and then only slightly. She now voided about one half pint of urine, the first in fourteen days. Vapor baths were now given every three hours, each one acting well on the skin. She was nourished with milk and beef tea. One grain of elaterium in a little sugar produced one good evacuation from the bowels. From this time out the patient passed water two or three times daily. The urine contained two-thirds albumen. She now complained of great pain in the loins, over the kidneys. Hot fomentations gave her great relief, and she passed a considerable quantity of water during the next twelve hours. The baths were continued for three weeks, being gradually reduced in frequency during the day: the iodide was continued for the same length of time. At the end of three weeks from the beginning of her illness the patient was able to be moved to a sofa. Her bowels acted daily, without any aperient. During convalescence meat and fish were given on alternate days, together with such vegetables as marrow and beans. About a quart of milk was taken daily. At the end of a month the patient was able to walk about, when she was removed to the country, where she gained strength rapidly. When the solid food was begun, fifteen minim doses of the perchloride of iron were substituted for the iodide. The attack was attributed to a cold.

Pathology of Hydrophobia.

At a recent meeting of the Microscopical Section of the Manchester Medical Society, reported in the *British Medical Journal*, Mr. E. H. Howlett exhibited some sections of the spinal cord from a case of hydrophobia. After briefly alluding to a series of cases of hydrophobia, in which four out of five persons bitten by the same rabid dog had died with well marked symptoms, he proceeded to discuss the pathology of the disease by stating that, for a long time, the virus had been known to exist in the saliva of rabid animals. Microscopical examination of saliva would naturally demonstrate the presence of numerous organisms, but such a result was to be expected even in the saliva of healthy individuals. With the view of ascertaining whether any particular form of disease could be discovered in the salivary glands themselves or in the blood, the following experiment was performed. Within an hour and a-half of death, portions of the submaxillary, parotid, and sublingual glands, with Stenson's duct, were dropped into test-tubes containing a fine turnip infusion; also the same organs were placed in some dry test-tubes, and the whole series placed in an incubator, where they were kept for several weeks. These

test-tubes were exhibited to the Society (eight months after the commencement of the experiment), and it was seen that the solutions remained perfectly bright and clear; and, of the dry preparations, with the exception of the one containing parotid gland, no change beyond the drying up of the tissue occurred. From these results, it was concluded that no organism existed in the salivary glands or blood in hydrophobia which was capable of causing any form of fermentative change. Microscopical examination of the other organs failed to demonstrate the presence of any micro-organism.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Transactions of the Medical Association of Georgia, Thirty-second Annual Session, 1881, comes to us from the Secretary, A. Sibley Campbell, M.D., as a handsome cloth-bound volume, of three hundred pages, well illustrated and containing much of interest.

——Photographic Illustrations of Cutaneous Syphilis. By George Henry Fox, A.M., M.D. New York: E. B. Treat, No. 757 Broadway. We have before us parts 10, 11, 12, of this most admirable series. The price is two dollars per part. They are well worth it, to all who can afford it. The illustrations are so realistic that they almost make one shudder; they remind us of the impressions made upon entering the chamber of criminals in Madame Tussaud's wax works establishment in London, where the representations of noted criminals are so natural and life-like as to be startling. These illustrations are so *beautifully* natural as to be horribly perfect.

——We have received from Messrs. G. P. Putnam's Sons, publishers, of New York, a circular, to the effect that the rumored sale or discontinuance of the *Journal of Nervous and Mental Diseases* has no foundation in fact. The journal will be published by them hereafter, as it has been in the past, under the editorial management of Dr. W. J. Morton, of New York City, assisted by Drs. Jewell (the former editor) Seguin, Hammond, Bannister, Clymer and Ott.

BOOK NOTICES.

Opium Smoking in America and China. By H. H. Kane, M.D., author of "Drugs that Enslave," etc. pp. 156. New York: G. P. Putnam's Sons, 1882. For sale in Philadelphia, by J. B. Lippincott & Co.

Dr. Kane possesses unusual facilities for familiarizing himself with the questions about which he treats. He is connected with a home for the cure of the opium habit, and has studied and written much on the subject. The author is a pleasing and instructive writer, and his book contains much that will be of interest to the physician. This habit of using opium as an intoxicant is, according to Dr. Kane, becoming frightfully prevalent in our country, so that in a few years it will constitute one of the evils with which sociologists will be compelled to make warfare. It behooves all who may directly or indirectly have any influence over the private life of others to read this book, that they may understand and be prepared to intelligently grapple with this growing social evil.

Illustrations of Dissections, in a Series of Original Colored Plates, the size of Life, representing the Dissection of the Human Body. By George Viner Ellis, Professor of Anatomy in University College, London, and G. H. Ford, Esq. pp. 233. New York: William Wood & Co. 1882.

This volume constitutes the January number of Wood's Library. It is one of the most interesting and valuable books that have been issued in this library, containing, as it does, a very large number of colored plates, reduced, on a uniform scale, from drawings from nature. An explanatory text accompanies each plate. This volume is well calculated to refresh the knowledge of anatomy acquired in the dissecting-room, and will be a useful addition to every physician's library.

Fistula, Hæmorrhoids, Painful Ulcers, Stricture, Prolapsus, and other diseases of the Rectum; their Diagnosis and Treatment. By William Allingham, Fellow of the Royal College of Surgeons of England, Surgeon to St. Mark's Hospital for Fistula and other Diseases of the Rectum, etc., etc. Fourth Edition. pp. 492. Price, $3.00. Philadelphia: Presley Blakiston, 1882.

This a valuable and practical work. Its practical nature is guaranteed by the opportunities for observation enjoyed by its author. Its value and popularity are attested by the sale of three large editions, and by its translation into French, Italian, Spanish and Russian. The literary tendency of the times is toward the production of volumes on special diseases and accidents, and it is necessary that this should be so. Since, in this age of unparalleled progress in everything, medicine and surgery participate, and hold their own, the accumulating information concerning different deranged conditions is becoming so extensive that it would be impossible for any text-book, however large and cumbersome, to contain all that is important and interesting. Therefore, these special volumes, when emanating from competent authors, are to be wel-

comed, and the one under consideration, we can truthfully say, possesses much interest for the general practitioner. It is well illustrated.

A Treatise on Human Physiology; designed for the use of Students and Practitioners of Medicine. By John C. Dalton, M.D., Professor of Physiology, and Hygiene in the College of Physicians and Surgeons, New York. pp. 792. Philaphia: Henry C. Lea's Son & Co. 1882.

It is only necessary to announce this new (seventh) edition of this standard work on Physiology, and to state that it has been thoroughly revised, so as to bring it up to the standard of the present time.

Diseases of Women, including their Pathology, Causation, Symptoms, Diagnosis and Treatment. A Manual for Students and Practitioners. By Arthur W. Edis, M.D. Lond., F.R.C.P., M.R.C.S., Assistant Obstetric Physician to the Middlesex Hospital, etc., etc. pp. 576. Philadelphia: Henry C. Lea's Son & Co. 1882.

We have so many good books on the diseases of women, that it seems almost needless to prepare any more for some time, until we have made such advances in this branch of medicine as to make the present volumes old and behind the age. Still, when a man who possesses opportunities for observation prepares a book, we may always be sure that we will find something instructive and interesting in it. The author of this work has had such opportunities, and we can commend his book to all physicians who have not on their shelves a recent standard work on diseases of women. The work is well illustrated.

The Sympathetic Diseases of the Eye. By Ludwig Mauthner, M.D., Royal Professor in the University of Vienna. Translated from the German by Warren Webster, M.D., Surgeon U. S. Army, and James A. Spalding, M.D., Member of the American Ophthalmological Society, etc. pp. 220. New York: William Wood & Co., 1881.

This is a valuable work, intended to bring familiarly before the general practitioner the important knowledge concerning sympathetic diseases of the eye. It is written in an interesting and intelligible style, and with a degree of force that carries conviction. When an author of eminence announces, in italicized words, "*When the other eye is in a state of irritation, an eye which still possesses vision must be unhesitatingly sacrificed*, success is too certain, and too much is at stake for the oculist to hesitate," we are led to conclude that he must have had great experience, else his edicts would be less positive. This will be found a very useful book by the general practitioner.

The International Encyclopædia of Surgery; a Systematic Treatise on the Theory and Practice of Surgery. By authors of various nations. Edited by John Ashhurst, Jr., M.D. Six vols. Vol. I, pp. 717. New York: Wm. Wood & Co.

This is a very valuable volume, prepared by gentlemen of universal reputation. The section on "Disturbances of Nutrition; the Pathology of Inflammation," is by S. Stricker, M.D., Professor of Experimental and General Pathology in the University of Vienna. "Inflammation," by Professor W. H. Van Buren, of New York. "Erysipelas," by Professor Alfred Stillé, of Philadelphia. "Pyæmia and Allied Conditions," by Francis Delafield, M.D., of New York. "Hydrophobia and Rabies; Glanders; Malignant Pustule," by William S. Forbes, M.D., Demonstrator of Anatomy, Jefferson Medical College, Philadelphia. "Scrofula and Tubercle," by Henry Trentham Butlin, Demonstrator of Surgery at St. Bartholomew's Hospital, London. "Rachitis," by J. Lewis Smith, M.D., Clinical Professor of Diseases of Children in Bellevue Medical College. "Scurvy," by Phillip S. Wales, M.D., Surgeon General U. S. Navy. "The Reciprocal Effects of Constitutional Conditions and Injuries," by A. Verneuil, M.D., Professor of Clinical Surgery in the Faculty of Medicine, Paris. "General Principles of Surgical Diagnosis," by Professor D. Hayes Agnew. "Shock," by C. W. Mansell Moullin, M.D., Surgical Registrar to the London Hospital. "Traumatic Delirium and Delirium Tremens," by William Hunt, M.D., of Philadelphia. "Anæsthetics and Anæsthesia," by Professor Henry M. Lyman, of Chicago. "Operative Surgery in General," by John H. Brinton, M.D., Lecturer on Operative Surgery in Jefferson Medical College, Philadelphia. "Minor Surgery," by Charles T. Hunter, M.D., Demonstrator of Anatomy in the University of Pennsylvania. "Plastic Surgery," by Christopher Johnston, M.D., Emeritus Professor of Surgery in the University of Maryland. "Amputations," by John Ashhurst, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. This synopsis of contents is the best way to notice this volume. The reader can, from it, form an idea of the scope and nature of the work. In these progressive days, encyclopædias are necessary to those who would desire to keep abreast of the times, and more particularly to those physicians who, living far away from large cities, are thereby denied the privileges of hospital instruction.

THE

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ETHICS COMMON TO PHYSICIANS AND PHARMACISTS.

It is of unquestioned importance, both to pharmacists and physicians, that the relations existing between them should be amicable and honorable. There can be no doubt but that all the worthy members of both these avocations earnestly desire such to be the case. Grievances have long existed which are not yet settled, and it requires a careful consideration of the equities of both sides to arrange entirely harmonious relations. The physician must not insist on steps which, if carried into effect, would depreciate the business interests of the druggist; and the latter ought not to insist on privileges which are detrimental to the physician. Both should recognize that the public and the general mass of society have claims which should not be overlooked.

These themes have been weighed conscientiously, by prominent members of both professions, and, as one of the results, we may name the unanimous adoption of a Code of Ethics by the Pennsylvania Pharmaceutical Association, at its last annual meeting, in June. Several of its sections pertain directly to the relations of pharmacists to physicians, and we believe that readers both in and out of this State will be glad to peruse them, and we, therefore, quote them, from the *American Journal of Pharmacy*:—

II. Although not a legitimate part of our business, custom and the necessity of the times warrant us in keeping the proprietary medicines of the day; yet, out of regard to the medical profession, and for the protection of the public, we earnestly recommend all pharmacists, when called upon for an opinion of their merits, to discourage their use, and neither to advertise nor permit their names to be used in advertising such medicines.

III. Recognizing the value of alcohol as a therapeutic agent, and the propriety of its being dispensed as such by pharmacists, yet deploring the wide-spread evil resulting from its indiscriminate use in its hundred insidious forms, we condemn any attempt to make it a prominent feature of our business, as unprofessional; and we denounce the loose practice of allowing it to be used on the premises, in any shape, as a beverage, as degrading, and we urge upon pharmacists the duty of exercising a conscientious care in dispensing a drug liable to such dangerous abuse.

IV. We discountenance all secret formulas between physicians and pharmacists, and consider it our duty to communicate such to one another, when requested.

V. We distinctly repudiate the practice of allowing physicians a percentage on their prescriptions, as derogatory to both professions.

VI. We will endeavor, as far as it lies in our power, to refrain from compromising the professional reputation of physicians, and we expect the same comity from them.

VII. Since the professional training of the pharmacist does not include those branches which enable the physician to diagnose and treat disease, we should in all practicable cases decline to give medical advice, and refer the applicant to a regular practitioner.

The remaining sections pertain to matters which have less interest for the medical profession, and we omit them.

There are two points in this Code to which we would particularly call the attention of physicians, because, if they are not carried out, it is the physicians who will be wholly to blame. These are the practice of secret formulas between physicians and druggists, and the acceptance by physicians of percentages from druggists. It is vain for some to say that these practices are unknown, or are very unusual. We know to the contrary, and we could name members of the medical profession in this city, of a certain degree of eminence, who do not hesitate to stoop to both these practices. They would not dare

to come forward and defend them, but they continue to make money out of them.

It would be well, and we suggest it here, that the members of every regular medical society individually sign a resolution declaring such practices dishonorable and denouncing those who persist in them. We have grave doubts whether all of the members of the medical societies in this city would sign such a paper; but if they do not, the reason would be obvious, and they should be censured. If we want the druggists to act according to the code of honor, why this tergiversation on our part? Why hesitate to put ourselves square on the record?

We predict, however, that although this course is so clear and open, it will not be taken. There are influences of too strong a kind against it; and the time has not yet come when even men holding official positions in the profession in this city are free from the questionable methods of financial "kiting" we have named.

INOCULATION.

In these days of unparalleled progress in everything, suggestions of all kinds are admissible, since nothing seems impossible of achievement. Our science fully holds its own in this march of progression, and is making rapid strides toward a firm scientific basis.

It becomes the duty of medical journalists to suggest to original medical investigators hitherto unexplored paths, and to encourage them to work in these directions.

Since it has been vouchsafed to us to discover a method by which the ravages of smallpox may be stayed, why, we would ask, cannot further investigation enable us to extend this protective immunity to all the contagious diseases. It is generally conceded that vaccination confers immunity from smallpox by destroying or altering some of the conditions of the blood necessary for the development of the disease. Why cannot these same effects be produced in connection with the other zymotic diseases. If, let us suppose, a person in health were to receive into the body some of the poison of typhoid fever, measles, scarlet fever, or diphtheria, might it not be that this poison could, without producing a dangerous disease, so modify and alter or destroy the conditions or elements upon which or from which this disease in its more virlulent form is developed as to render the subsequent occurrence of a severe and fatal attack as rare as in the case of smallpox. Might not this poison, introduced into a system not yet ripe for it, where it would find the conditions necessary for the full development of the particular disease, yet have such an effect on these elements or conditions, whatever they may be, that they would never after be capable of uniting with the poison and producing the disease in its aggravated form. These few words are given as a hint; we would invite discussion on the subject.

Notes and Comments.

Physiological Effects of Prolonged Bathing.

In an investigation on the above subject, published in *Paris Médical*, for December, and giving a very accurate account of the effects which baths produce on the system, according to their duration and temperature, Dr. Théry has arrived at a number of conclusions which are both interesting and true. He says: A bath at 97° Fahrenheit is without effect on the circulation. All baths below 97° reduce the action of the heart. The beats, however, acquire greater energy. The pulse retains perfect regularity. Circulation is not reduced in direct ratio with the temperature of the water, but it is influenced by the duration of the bath.

When baths at 75° or less are prolonged for an hour, arterial pulsation continues decreasing after exit from the water. Baths at or below the temperature of the body quicken circulation. This acceleration is proportional to the temperature of the water. The pulse is irregular and the heart fluttering.

Baths between 97° and 99° are without effect on animal heat. Baths below 97° reduce the temperature of the body. Baths between 92° and 97° cause a loss of 0.97° to 1.46°; this reduction is obtained within half an hour; after this the thermometer remains stationary, even should the bath be continued for two hours.

In baths at 86° or under the fall in temperature is more gradual; it is in proportion to the duration of the bath.

The first effect of a bath at 72° or less causes

a slight elevation of temperature. The fall in temperature obtained by means of a half hour bath at 98° is almost equal to that produced by a bath at 72° continued for an hour. After a bath above 82°, continued for an hour or two, temperature has an upward tendency, although for the following twelve hours it remains from 0.5° to 1° below what it was before the bath. After a bath under 81°, the thermometer continues falling during the next twenty minutes following exit. During the twelve hours following a prolonged bath, at from 64° to 81°, the thermometer indicates a reduction of 1° to 1.50° from the initial temperature.

All baths at or above the temperature of the body produce a rise in central temperature. The rise, in proportion to the temperature of the water, is progressive. A bath at 108°, continued for nineteen minutes, raises the temperature of the body to 104°. A bath at 68° progressively raised to 95° produces a fall in temperature. A bath at 97° gradually reduced to 75° causes, as a first effect, a fall in temperature; but subsequently, in proportion as the temperature of the bath decreases, that of the body rises. It is only between 91° and 97° that baths can be continued for a long time without causing suffering.

In water, the sensation of cold acts by reflex action, first on the smooth muscular fibres, and later on the striated.

Hot baths predispose to syncope; they are followed by profuse perspiration.

All baths, when long continued, are debilitating.

Elongation of the Lingual Nerve.

At a meeting of the Société de Chirurgie, reported in *Le Progrès Médical*, M. Ledentu presented a woman upon whom he had performed an elongation of the lingual nerve, in a case of tic douloureux of the face and epileptiform neuralgia of five years' standing. Having no positive data as to the tractile force that should be applied, and mindful of the accidents which have sometimes attended the elongation of cranial nerves, M. Ledentu, after exposing the nerve, took it up on a hook and carefully raised it only about four lines above the buccal floor; he then allowed it to drop in the wound, where it assumed an S shape. Immediate relief followed, and for thirteen days past the patient had not experienced any of her former excruciating pains. Will this condition continue? In the debate that ensued M. Auger asked if the lingual nerve had a red and inflamed appearance, that having been his own experience in a case in which he had lately operated. M. Ledentu replied that the nerve was normal, both in form and color. M. Polaillon believed the cure would be a permanent one; he had performed a similar operation, some three months before, and the patient was doing well. M. Nicaise spoke of the dangers incident to elongations of cranial nerves. In conclusion, M. Tillaux mentioned a case of a purulent flow of the eye in a patient upon whom he had performed a resection of the upper maxillary nerve. This accident, he believed, was due to the nerve section. The patient, for the last four years, had been doing remarkably well.

The Treatment of Scarlatina.

In an article published in *Le Concours Médical*, Dr. Paul Gerne, makes the following suggestions for the treatment of scarlatina. He says:—

We shall not here attempt to decide on the prophylactic and curative merits of belladonna; we will only say that experiments made for that purpose have given widely divergent results. If it is desired to use this remedy, the following is a good formula:—

℞. Ext. belladonna, 0.15 c. = gr. ii½
Distilled water, 30 gm. = ʒ viiss
Alcohol, rectified, 1 " = ♏xv. M.

Of this mixture, give as many drops, morning and evening, as there are years in the patient's age.

In regular and normal forms of the disease the treatment should be purely hygienic; the patient must be kept in bed, in a room having a temperature of from 64° to 68°, F.

The patient should not be surfeited with warm drinks; he may have reasonable quantities of lemonade, to which wine can be added, when there are symptoms of weakness.

Until the period of desquamation is reached, the food should consist of broth, unless otherwise specially indicated.

The infectious nature of the disease warrants the use, as recommended by Scott, of an aqueous solution of sulpho-phenate of soda, in doses of from 0.30 centigr. to 1 gram (= grs. ivss—xv.) In irregular forms, the predominating symptoms, will, of course, indicate the particular measures that should be adopted. The hyperthermia in those ataxic forms rapidly accompanied by serious nervous, comatose, convulsive, or dyspnœic symptoms, is successfully checked by cold lotions and affusions, and in very severe cases, cold baths may even be given.

As an anti-thermic remedy, we use sulphate of quinine; but salicylate of soda should never be

displayed, because it might superinduce nephritis, which is always imminent, or aggravate it, if already present.

In syncopal forms, wine, alcohol, cinchona and digitalis, are to be exhibited.

In gastro-intestinal forms (complicated from the start by incoercible vomiting and profuse and persistent diarrhœa), opiates are to be used, also Seltzer water, and ice in small pieces be frequently given by the mouth.

We will conclude with a few remarks on the experiments made by Dr. Demme, of Berne, with *pilocarpine*. According to him, in scarlatina, when the exanthema is retarded, excellent results may be derived from the diaphoretic effects of pilocarpine, and the serious nervous symptoms usually occurring in such cases may be averted. But this medication, even when displayed at the outset of the eruptive period, is powerless in preventing renal complications. By stimulating diaphoresis, it may lessen the gravity of the uræmic symptoms, which frequently happen during the period of decrease. But the use of this remedy requires the greatest caution; its depressive action upon the heart, when given in rather high doses, predisposes to collapse, and this danger is almost constantly impending, after the use, during a few days, of hypodermic injections of one-sixth of a grain of chlorhydrate of pilocarpine. Dr. Demme, therefore, recommends that this remedy should only be administered in limited doses, and that its use be preceded by cordials, generous wines, or strong infusions of coffee or tea.

The Purity of Chloroform.

While even perfect purity in chloroform is not an absolute safeguard against accidents, it is of sufficient importance to deserve the attention of every surgeon; hence the following easy tests, recommended by Professor Regnauld, and published in *Le Progrés Médical*, will no doubt be read with interest.

1st. Chloroform should have an agreeable odor.

2d. It should not redden blue litmus paper.

3d. Added to a solution of nitrate of silver, it should neither give a precipitate, nor even cause cloudiness.

4th. It should not become colored, when brought to the boiling point, along with a concentrated solution of caustic potash.

5th. Sulphuric acid should not blacken when brought in contact with chloroform.

The above tests are not difficult; besides these, there are others, such as determining the *specific gravity* and the *boiling point*, which, however, are more within the province of a chemist; but no chloroform should ever be used for anæsthetic purposes which does not comply with the above requirements.

Chloroform, even when perfectly pure, is liable to sudden changes. Exposure to light, an imperfect cork stopper, or a but partially filled bottle, are conditions which may affect its purity; hence it should be occasionally tested, especially before using. Dr. Yvon, is of opinion that the sulphuric acid test is not fully reliable; on the other hand, as caustic alkalies are used for the purpose of rectifying chloroform, there may be circumstances when the absence of coloration with an alkaline solution is not positive evidence of purity; he, therefore, recommends, as a far more delicate test, the combined action of permanganate of potash and a caustic alkali.

As a reagent, he uses a solution of:—

℞.	Permanganate of potash,	gr. xv
	Caustic potash,	ʒ iiss
	Distilled water,	℥ viiss.

This solution is of a handsome violet-red color, and when in contact with *pure chloroform*, remains unchanged. But if the chloroform has been *imperfectly* rectified, the solution is acted upon, and its color gradually changes to green.

To be successful, this test requires considerable nicety.

Syphilis from Epidermic Grafting.

In the *Progrés Médical*, we notice that at a meeting of the Société Médical des Hôpitaux, M. Fèréol reported the following, case observed by M. Debel: A man, 49 years old, was under treatment for gangrenous erysipelas, and extensive ulcerations, the cicatrization of which was progressing with great difficulty. M. Debel applied 45 dermo epidermic grafts on the external half of the sore. 33 of these were successful. A few days later, a number of other grafts, taken from different individuals, were applied to the internal half of the ulceration. Not long after cicatrization was progressing favorably, but there appeared on the sore an ulceration of the size of a twenty-cent piece, having a grayish-white color, which went on increasing, and presently overspread the untire ulceration.

After a time, mucous patches appeared in the mouth, and roseola over the skin. The presence of syphilis was unmistakable. Upon investigation, the attending physician found that the patient's son, from whom some of the grafts had been taken, was suffering from syphilis. In this case specific treatment was found useful, and under its influence cicatrization of the sore was successfully accomplished.

A Remarkable Wound of the Brain.

The *Lancet* for January, 1882, reports the following wonderful case, which was presented to the Société de Médicine de Paris by M. Dubrisay. A man determined on suicide held in his left hand a dagger, about 3½ inches long and ⅓ of an inch wide, and placing the point against his skull, struck it several blows with a mallet, believing that he would fall dead at the first blow. To his surprise he felt no pain, and observed no phenomena. He struck the dagger, in all, about a dozen times. When seen, the handle of the dagger was projecting from the skull at the junction of the posterior and middle third, a little to the right of the middle line, and in a transverse position. All of the blade except one-third of an inch was imbedded. The most strenuous efforts were made to remove the dagger, without avail, so tightly was it held in position. Neither did these efforts cause any pain. The man then *walked* to a coppersmith's, where he was fastened to rings fixed in the ground, and by strong pincers the handle of the dagger was fastened to a chain, which was placed over a cylinder turned by steam power. At the second turn the dagger came out. The patient, during all this time, suffered no pain or inconvenience, and in a few minutes *walked* to a hospital, where he remained in bed for ten days, but without fever or pain. He then returned to his work, and the wound gradually healed. By driving the dagger into the head of a cadaver in the same situation and to the same depth, M. Dubrisay found that, without injuring the superior longitudinal sinus, it had passed into the cerebral substance, just behind the ascending parietal convolutions, and thus behind the motor zone; the point had not reached the base.

Diabetes Insipidus Treated by Electricity.

Dr. C. P. B. Clubbe speaks of this method of treating diabetes, in the London *Lancet*. He reports the case of a woman who passed from eighteen to twenty pints of urine per diem. It was light colored, very low specific gravity, and contained no sugar. All the drugs recommended for diabetes were tried, without result. She was then ordered electricity (faradaism), to be applied over the region of her kidneys every day, for about twenty minutes at a time. Under this treatment the daily average amount of urine diminished during six weeks, from 237 to 113 ounces; where it remained nearly stationary, varying but little. At the end of the twentieth week all treatment was discontinued. Six months afterwards she was in about the same condition as when treatment was stopped. Dr. Clubbe thinks this result would justify the more extended use of this treatment in diabetes insipidus.

Traumatic Tetanus—Recovery.

Dr. H. J. Lloyd reports the following case of traumatic tetanus which terminated in recovery, in the London *Lancet*. The patient, six years old, had his hand lacerated. The wounds healed satisfactorily. Two weeks subsequently tetanic symptoms set in. The disease was well marked and characteristic in every symptom. The treatment adopted was to open the bowels with a brisk purgative of calomel and scammony, application of ice to the spine, and after the bowels were well moved, three grains of hydrate of chloral were given every hour, until sleep was produced, then every four hours, as long as rigidity of the muscles continued. The patient was kept up with beef tea and mutton broth. The bowels were kept open with the purgative powder occasionally. In three days the spasms gradually disappeared, and the patient was quite well in a month.

A New Bougie.

In the *Transactions* of the Mississippi Medical Association, Dr. Daniel reports two cases where, after having failed to pass the smallest bougie through a stricture of the urethra, he resorted to a small fiddle string, which readily passed the obstruction. After remaining in situ a few minutes, it was found, upon withdrawal, to have swollen to nearly double its original size. A larger string was passed, and after remaining ten or fifteen minutes, was withdrawn, when the urethra was found to be sufficiently dilated to allow the passage of a No. 4 bougie.

A Grain of Corn Discharged Through the Chest.

Dr. S. Wilks reported an interesting case to the Pathological Society of London (London *Lancet*). The patient (a child) was suffering from an abscess over the left supra-scapular region, the skin over it feeling boggy. A grooved needle was passed in, and a puff of air and pus came out. Free suppuration occurred, and after a time a grain of corn was passed, and then the wound healed. No other cause being found for its presence, it seemed that the grain of corn must have been inspired into the lung.

Chlorosis Treated by Chlorhydric Acid.

In the *Centralblatt für die Med. Wissensch.*, Dr. Zander contests the somewhat generally accepted opinion, that chlorosis is developed by a deficiency of iron in the alimentation. He believes that food always contains a sufficient quantity of iron, but its absorption is often imperfect, because the digestive juices are of faulty composition, and more especially, owing to the fact that the gastric juice lacks its necessary proportion of chlorhydric acid. As an attending consequence, the albuminoid principles are but imperfectly digested, hence, languid nutrition also follows.

Acting upon this theory, Dr. Zander has treated chlorosis by the aid of chlorhydric acid, giving it according to the following formula:—

℞. Chlorhydric acid, fʒ ss–j
Distilled water, fʒ vj. M.

One or two tablespoonfuls after each meal.

In very stubborn cases, he has added artificial pepsine to the chlorhydric acid. The results have always proved highly satisfactory.

Ergotine in Pharyngitis.

The *Revue Mensuelle de Laryngologie*, indicates a therapeutic method which may give good results in cases of chronic pharyngitis, complicated by exaggerated enlargement of the pharyngeal veins, and muco-purulent secretions. It advises the use of—

℞. Ergotine, gr. xv
Tincture of iodine, ʒj
Glycerine, fʒ viiss. M.

To be liberally applied, twice a day, on the pharynx, by means of a brush.

Special Reports.

NO. III.—INFECTIOUS DISEASES (Continued.)

In examining the literature of the past year, we fail to find any progress worthy of special note in the domain of etiology and treatment of the infectious diseases, beyond those already recorded with reference to diphtheria. We have great reason to hope, and this hope is encouraged by the valuable researches and discoveries of M. Pasteur and of other workers in the same field, that the day is not far distant when we will possess accurate knowledge concerning the causative agency of the various infectious diseases.

It is from research in this direction that we must, in an especial manner, look for the grounds upon which to base a rational and successful therapeutic course. Clinical research has been and is, a very valuable aid to therapeutics; indeed, most of the existing knowledge we have to-day concerning the treatment of disease, has been derived solely from clinical observation. But, without desiring to detract from this valuable factor, we must recognize that it is very much like working in the dark, so far as discovering a specific for the poison of the infectious diseases. We all admit our inability to control, cut short, or abort a case of typhoid fever, of measles, of scarlet fever, and the like. We can only treat collateral symptoms as they may arise, support the patient and wait until the special poison has expended its force, the disease has run its course, and hope for a successful termination.

If some original investigator can exactly determine the nature of the special animal or vegetable growth which, when introduced into the system, is capable of giving rise to any of these zymotic diseases, a great step towards a special therapeutics of this disease has been made. If, then, he can produce this growth artificially, outside of the body, a great stride has been made, and he has, most likely, within his possession the necessary elements out of which to evolve a *specific* for this disease.

If, as we suppose, the development of the zymotic diseases is due to the presence and activity of some foreign living elements in the system, it would seem to be a rational conclusion that if the life of these foreign elements could be destroyed, the disease would not be developed, it could be aborted.

Therefore, when some investigator has succeeded in artificially developing the disease germs, he can take them into his chemical laboratory, and by repeated experiments may finally be enabled to decide upon some drug capable of destroying their vitality. It will then remain for extended clinical research to demonstrate whether or not this parasiticide will still retain its destructive power when it meets the organisms in the system, surrounded and influenced, as they must be, by the conditions they find therein.

This would seem to be the course indicated by which we may hope to ultimately discover some remedy through the potency of which we may be enabled to abort these diseases in their incipiency. We trust and pray that before many years have gone by we may have the extreme pleasure of recording some such results. The example set us by M. Pasteur is in the right direction, and it behooves some of our energetic American physicians to follow in his footsteps, and endeavor to

surpass him, so that this wonderful discovery may emanate from our wonderful country.

During the past year more attention has been given to the means of preventing the ravages of the infectious diseases, both by disseminating information touching on the prophylaxis and by public and concerted measures. The Contagious Diseases Act in Great Britain has been productive of very much good. Inspector ANNISS stated, in the London *Lancet*, that under the working of this act the ravages of infectious diseases had very much diminished. Formerly cases of smallpox and scarlet fever might exist in brothels, quite unknown to the authorities, and thus the infection might be communicated to a large number of persons. Under the present system such a case could not remain unnoticed by him on his visits, and he would order the brothel keepers at once to send the patient to the hospital, and to have the rooms properly disinfected; otherwise, he would take measures to have the house placed "*out of bounds*," that soldiers and sailors should receive strict orders not to enter it. Realizing, as we do, the importance of isolation in staying the ravages of infectious diseases, we are prepared to appreciate the wisdom of this provision of the act.

It is a matter of paramount importance that physicians should thoroughly realize and should instruct the public that the evil habit of suppressing the existence of infectious diseases, lest their known presence may injuriously affect the commerce of a locality, is very strongly calculated to favor the continuance and increase of these diseases. It is a wrong and fatal idea, and should be corrected. Realizing this point, the Sanitary Council of the Mississippi Valley passed the following resolution:—

Resolved, That this Council condemns all methods of suppression and secrecy with reference to information of contagious or infectious diseases; therefore it discountenances the use of *cipher* telegrams; but in the event of danger from such diseases at any point in the Mississippi Valley, it is the duty of the executive officer of the health organization of such place to fully and promptly advise the proper authorities at all threatened points.

This is a point that is entirely too much neglected. When we must realize that isolation is one of the most potent (and in many cases the most powerful) means of circumscribing infectious epidemics, we must admit and teach that it is the first duty and a most conscientious one, for all physicians, as well as the public press, to give full notoriety to any cases of infectious diseases that may exist in a locality, in order that the health authorities and the public may be roused from their lethargy and stirred into instituting proper and efficient isolative and disinfective measures.

From the *National Board of Health Bulletin*, we note that a sanitary examination of the city of Memphis, subsequent to the fearful epidemic of yellow fever which prevailed there in 1878, exhibited the following condition. The death rate for three years previous to 1878 was 35 per 1000; for the first yellow fever year 114 per 1000, and for the last 51 per 1000. Within the city limits were found six thousand sub surface cesspools in use. They were, in many instances, shallow holes, with no lining. Many of them were in dangerous proximity to dwelling rooms, some of them being actually excavated in the cellars of occupied dwellings. There were also a large number of disused but *full* vaults, the contents of which, in some cases, were entirely uncovered, while in the majority there was only a thin layer of ashes. Nearly all the cisterns and wells that supplied water to the inhabitants were situated sufficiently near to these vaults to be contaminated by their leakage. Is it any wonder that this terrible epidemic prevailed? Ought we not rather to be surprised that it spared any one? This terrible state of affairs was intelligently remedied, and as a result, Memphis has been comparatively free from disease.

The *Mississippi Valley Medical Monthly* gives some statistics that demonstrate more clearly than words how possible it is to limit the infectious diseases, and how beneficial have been the intelligent sanitary improvements carried out in Memphis. From them we learn that the decrease in deaths from zymotic diseases during 1881, as compared with 1880, was, in Memphis 0.73; in Cincinnati only 0.48; in Chicago 1.12; while in New York the increase was 2.06; in Brooklyn 1.65; and in Philadelphia 2.68. Philadelphia has of late years been a very dirty city.

During the first quarter of 1880, the death rate in Memphis from diarrhœal diseases was 1.19 per 1000; for the same period of 1881 it was 0.59, a decrease of fifty per cent. Many valuable lessons in the limitation of infectious diseases can be derived from the sad experience of disease stricken Memphis, and its subsequent restoration on sound sanitary principles; lessons that teach us that we have, to a great extent, in our hands the sure means of saving many lives annually that are now prematurely sacrificed on the altar of infection.

(*To be Continued.*)

CORRESPONDENCE.

Penetrating Gunshot Wound of Brain.

ED. MED. AND SURG. REPORTER:—

In your issue of January 28th, 1882, is an article from the Boston *Medical and Surgical Journal*, by Dr. J. Foster Bush, giving the details of a case of penetrating gunshot wound of the brain, so similar in locality and course of the ball, but so very different in effects to one that came under my care when a surgeon in the Confederate army, that I feel it is worthy of publicity.

Private J. B. C., of the Twelfth Tennessee Regiment of Confederate Volunteer Infantry, while on picket duty in front of our army, at Corinth, Miss., May, 1862, standing behind a tree, in the act of taking aim at one of the enemy, also on picket duty, head protruding, received a ball from what was supposed to be a Maynard rifle, of about forty calibre, one and one-half inches above the left eye. He said, "I fell, dropping my gun, very much stunned, but soon recovered enough to regain my gun, and with it and other equipage, walked to camp (distant two miles). Seated in a chair in front of my tent, I examined his wound, finding it located as above stated, with quite an amount of blood on and around the wound, coagulated, and with the coagulated blood was as much as a tablespoonful of brain; he seemed to be perfectly rational; said he had not lost very much blood; pulse and general appearance did not indicate that he had; did not complain of much pain; had neither paralysis, loss of sensation, nor aberration of vision. On examining the wound it was found to be large enough to admit the little finger to the second joint. The aperture in the skull was remarkably smooth, having but a few small spiculæ; the ball passed directly inward and backward (no other probe than the finger was used in the examination), but did not pass out, and consequently remained in the cerebral cavity. The wound was cleansed and dressed with a wet compress and bandage, and he sent to the hospital, three miles in the rear, in the town of Corinth. I learned that he had high fever on the third or fourth night, and was delirious. In a few days the evacuation of Corinth took place, preventing my seeing or hearing anything from him for some six weeks or two months, when he surprised me very much by returning and reporting to his command for duty, in as good health, he said, as he ever was. The only thing to indicate that he had had a serious wound, was a scar and marked depression in the bone. He continued in good health, on active duty, making the campaign into Kentucky, with Bragg, in midsummer, returning about the first of October, at which time he became subject to epileptoid seizures, which gradually developed into well defined epilepsy, for which he was discharged in February, 1863. Mr. C. was in my office two or three months ago, in fine health. Says his "fits" have gradually become lighter, and do not now give him much inconvenience; and his father, in the last few days, said "he did not think he had them at all now."

S. W. CALDWELL, M.D.

Trenton, Tenn., February, 1882.

The Spread of Smallpox.

ED. MED. AND SURG. REPORTER:—

I have read with great interest your article on the "Spread of Smallpox." There is one form of contagion, however, that I do not find noticed very frequently in medical journals, viz: the contagion emanating from the rag-rooms of paper mills. During the last ten years, fully three-fourths of the smallpox cases I have attended occurred among employés in the paper mills, chiefly those engaged in sorting rags. The cases were most prevalent in those mills where domestic rags were used. I remember but few cases in those mills where imported rags were used, which, I have been informed, are very thoroughly disinfected before they are received at the mills.

While on the subject of smallpox, I would like to call attention to the question of the identity of variola and varicella. Although the majority of the profession do not believe in this identity, yet, during the last few years, several cases have come under my care which would seem to make me doubt whether the two diseases may not be one and the same. During November, 1879, I was called to see two children, a boy and a girl, aged, respectively, 12 and 14 years, who had high fever, pain in the back, and many of the prodromes of variola. They proved to be severe cases of varicella. During the convalescence of these children, they were visited by a girl, aged about 15 years. Ten days subsequently she was seized with the same symptoms, but the disease turned out to be variola, a malignant case, severe epistaxis and metrorrhagia being among the grave symptoms. Death occurred at the end of the sixth day. During the last four years a number of similar cases have occurred in my practice. It may be said in regard to the first cases that they were light cases of varioloid. Surely a light case of varioloid and a severe one of varicella are scarcely distinguishable from each other. I do not argue, from the few cases I have observed, that variola and varicella are identical, but merely submit these few remarks to the attention of the medical profession, in the hope of eliciting discussion, and probably throwing further light upon what I think may be considered a very important question.

ROSS R. BUNTING, M.D.

Roxborough, Pa., Feb'y 9th, 1882.

Congenital Dislocation of Tibia.

ED. MED. AND SURG. REPORTER:—

I was called last November to see a child some four hours old. I found the leg dislocated backward into the popliteal space and at a right angle with the femur. The midwife said the child was born head first. I reduced the dislocation with very little effort, when the knee seemed perfect in conformation. I applied a splint. At the end of two days, I removed the dressing, and found the joint all right. No heat, swelling or pain. Motion perfect. I re-applied the splint and kept it on for a few days, when I permanently removed it. From all I could learn, the dislocation must have occurred before the child

was born. It seemed strange that no soreness or inflammation should have followed so extensive a dislocation. NORMAN GRAY, M.D.

Columbus, Ohio, February, 1st, 1880.

NEWS AND MISCELLANY.

Test for Pepsin.

Dr. Carl L. Jensen, after showing the faults in the usual methods of testing pepsin, gives the following directions for testing its efficiency, claiming that the pepsin he prepares will stand this test: Dissolve thoroughly two grains of pepsin in twenty four ounces of water (do not use hot water), have the solution well stirred up. To three ounces of this solution (which will contain ¼ grain of pepsin), add fifteen drops of acid muriatic, c. p., and two hundred and fifty grains of boiled albumen, previously pressed through a sieve having thirty threads or meshes to the inch. Perform the test in a six-ounce bottle, placed in a water bath, and maintain a temperature of 100° Fah. for six hours, shaking the bottle every ten minutes. At the end of six hours strain the solution from the undissolved albumen, and place the residue upon several layers of blotting paper, until so much moisture is absorbed that the albumen has regained its former consistence, then weigh it and deduct. Dr. Jensen believes that one grain of his pepsin will dissolve nearly one thousand grains of albumen.

A Worthy Charity.

The Pennsylvania Institution for the Instruction of the Blind have issued a little circular, from which we note that there are nearly four thousand blind persons in this State, nine hundred and sixty-eight of whom are in Philadelphia county alone. The Pennsylvania Institution for the Instruction of the Blind will receive applicants between the ages of ten and twenty-five. The Pennsylvania Working Home for Blind Men will receive those between the ages of twenty-five and fifty, to learn trades and receive employment therein. The Pennsylvania Industrial Home for Blind Women will instruct and employ blind females of twenty-one years and upward. The blind in many counties know nothing about these institutions. It should be the duty of all citizens to avail themselves of these institutions for the relief of the blind of their neighborhood. For further information address William Chapin, Principal of the Pennsylvania Institution for the Instruction of the Blind, Philadelphia, Pa.

An Enterprising Vaccinator.

A pleasant-looking, middle aged man recently made his appearance in the upper part of Hunterdon County, New Jersey. He said that he was a physician sent by the Board of Health of Jersey City to vaccinate the people of the county. His affable manners and apparent air of authority convinced most of his hearers that he told the truth. He stated that the Board had ordered him to charge one dollar for every adult and fifty cents for every child whom he vaccinated, in order to defray the expenses incurred. He reduced the price when the parties were too poor to pay the sum asked, and even vaccinated some for nothing. He went from house to house in a buggy, and returned to the large towns at night. The fact that he was a fraud, and that the Board of Health had never sent out any physician, did not become known until the man had left the county. He collected a large sum of money.

Cinchona Cultivation in Jamaica.

New Remedies quotes from the New York *Times* some remarks on this subject, a few points from which are of interest. Jamaica offers great natural advantages to the cinchona cultivator. At present England takes all the bark grown there at the remunerative price of from eighty cents to two dollars and five cents a pound. Many gentlemen in the island, including the Governor, are engaging in the cultivation of the trees. The business is daily increasing, and the demand on the Botanical Department for seeds and trees can hardly be supplied. The profit to be derived is very great, though the enterprise would require at least $2500 capital. The yield, at a low estimate, would be worth $9000 per acre.

Disagreement among Physicians.

An exchange says that an interesting difference of opinion, that can be settled only by time, now exists between Professor Depaul and Dr. Tillaux, concerning a woman, more than seventy years of age, who has been an ardent worshipper at the shrines of both Venus and Bacchus. The Professor believes her to be pregnant, while the doctor is sure that the abdominal enlargement is due to a tumor of the liver. We will wait and discover the truth.

Personal.

From the *British Medical Journal* we learn that on November 12th several of the chief hospital surgeons of Paris gave a banquet to Mr. Spencer Wells. Professor Gosselin, in a happily improvised speech, rendered homage to the great services which Mr. Spencer Wells has rendered to humanity by demonstrating "the possibility and the opportunism of that splendid operation, ovariotomy." This was a well deserved compliment to a distinguished man.

Styptic Colloid.

The *Chemist and Druggist* (London) says that the following will instantly coagulate blood, forming a consistent clot, under which wounds will readily heal:—

Collodion,	100 parts
Carbolic acid.	10 "
Tannic acid,	5 "
Benzoic acid,	5 "

Mix the ingredients in the above order.

Alumni Association of Albany Medical College.

The annual dinner of the Alumni Association of the Albany Medical College will take place at the Delavan House, Wednesday, March 1st, 1882, immediately after the Commencement exercise at Tweddle Hall.

Obligatory Vaccination in Switzerland.

The Swiss National Council have made vaccination obligatory in Switzerland, by a vote of ninety to twenty-three. Every infant must be vaccinated during the first year of life, or at latest, during the second year. Infants born out of Switzerland, if not previously vaccinated, must submit to the same rule. No child will be allowed to attend either public or private school without a certificate of vaccination.

Ambulance Service in London.

A meeting to consider the feasibility of establishing a general hospital ambulance service was recently held in London. Many influential persons were present, including representatives from the principal hospitals. The Duke of Cambridge presided. Resolutions were passed in favor of the adoption of the New York system.

Diphtheritic Contagium.

We have received the supplement to the *National Board of Health Bulletin*, containing a full report of the investigations into the "Nature of the Diphtheritic Contagium," which have been conducted by Professor Wood and Dr. H. C. Formad. In a subsequent issue we will give a digest of the report.

Purification of Air in Hospitals.

Dr. Neale recommends, in the London *Medical Times and Gazette*, a chemical punkah, the fan of which, being made of vegetable fibre, is saturated with caustic soda solution, fed from a small tank above.

Items.

—Hepatotomy has been recently performed three times, successfully, by Mr. Lawson Tait, of Birmingham, England.

—Fifteen prominent citizens of Minnesota have been affected with trichinæ, from eating raw ham. Three of the number died

—On Boston authority it is stated that the latest high school translation of "*Arma virumque cano*" is "I sing of arms and the virus."

—Dr. C. H. Merrick, Seattle, W. T., will send to any address, on the receipt of a three-cent stamp, "The Decimal System of Writing Prescriptions."

—A Chicago druggist, supposing he was connected with a wholesale house, telephoned to the lady at the exchange, "Have you any large black nipples?" He is still waiting for a reply.

—Reports from all parts of the country indicate that smallpox is on the increase. It is very prevalent in New York, while fresh cases are reported from Massachusetts, Virginia, and Chicago. The disease is under control in this city, and the number of new cases reported is daily diminishing.

—A gentleman entered the office of a medical friend, and taking up what he supposed to be a toothpick from the table, began picking his teeth. Presently he pricked his tongue, and a consequent exclamation called the doctor's attention to what was going on. The supposed toothpick was a vaccine point, and it "took."

OBITUARY NOTICES.

—Dr. George T. Campbell, an old and respected physician of Skaneateles, N. Y., died on the 12th inst.

—Dr. Charles F. Stansbury died suddenly, from heart disease, in Georgetown, D. C., Wednesday, February 1st. Dr. Stansbury was born in New York City, in 1821, and has been prominently connected with the Masonic Order and with journalism, having been at one time a leading writer on the *National Intelligencer*.

—Dr. Isaac H. Conrad, a well known physician of this city, died, February 1st, of Bright's disease, in the 68th year of his age. Dr. Conrad was a descendant of one of the twelve families of German Friends who came from Cusheim, with Daniel Francis Pastorius, in1683, and were the first settlers in Germantown. He pursued the practice of his profession in Philadelphia, where he spent his entire life, and his services were rendered with equal freedom and ability to all who called on him, regardless of their means.

—Dr. James C. Jackson, for over thirty years a physician in Hartford, Conn., died Feb. 7th, of typhoid pneumonia. Dr. Jackson was born in Cornish, N. H., Aug. 22d, 1818. After a preliminary course of study, he entered Dartmouth College, in the Class of '44, and studied medicine at the same college, and subsequently in Philadelphia, where he received his degree of M. D., in 1847. He has been one of the most respected of the citizens of Hartford, and his death is felt to be a public loss. He was conscious up to within a few moments of his death, and felt his own pulse and noted his condition. He was twice married but had no children.

MARRIAGES.

COMEGYS—NOTSON.—At Columbus Barracks, O., Feb. 14th, by the Rev. C. H. Babcock, Captain Edward Tiffin Comegys, M.D., U. S. A., and Miss Minnie G. Notson.

LITTLE—HETHERINGTON.—On Thursday evening, February 9, 1882, at the residence of the bride, by Rev. C. F. Turner, George Little, M.D., and Miss Jennie Hetherington, both of Philadelphia.

SATTLER—RAY.—In Cincinnati, Ohio, February 9, 1882, Dr. Robert Sattler and Miss Maud Ray.

DEATHS.

MARCY.—At Cape May, N. J., Samuel S. Marcy, M.D., in the 89th year of his age.

MASON.—In New York, on Sunday, Feb. 12, 1882, Theodore L. Mason, M.D., in the 79th year of his age.

VIELE.—Entered into rest on Sunday, Feb. 12th, Augustus Viele, M.D., of New York, in the 67th year of his age.

WHITE.—In Riverton, N. J., on the 12th inst., Robert White, M.D., aged 24 years.

WHITALL.—In New York, on the 18th instant, at his residence, No. 607 Lexington av., Samuel Whitall, M.D., aged 41 years.